Intel Global Challenge
at UC Berkeley

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Welcome!

On behalf of the University of California at Berkeley and Intel, we would like to welcome you to the 7th Annual Intel Global Challenge at UC Berkeley (formerly the Intel+UC Berkeley Technology Entrepreneurship Challenge) – the premier global business competition focused on technology.

The Intel Global Challenge is a joint project of Intel and the Lester Center for Entrepreneurship at UC Berkeley that brings together entrepreneurial teams from world-class engineering and business schools. Through education, collaboration, and competition in an international championship event, it provides a forum where teams can present their business and technology start-ups focused on ideas that will impact the world.

Entrepreneurship is driving growth and change in the global economy. The Intel Global Challenge showcases the global business opportunities that have the greatest potential for a positive impact on society through the deployment of new and truly innovative technologies. Through the Challenge, Intel and UC Berkeley are committed to aiding universities worldwide in providing an environment, including technical and business curricula, that supports entrepreneurs and helps them make their dreams a reality.

Intel, building on its heritage of technology innovation, collaborates with governments and universities around the world to promote entrepreneurship. UC Berkeley, the Haas School of Business and the Lester Center for Entrepreneurship are global leaders in education and support for entrepreneurship and the stimulation of new venture creation. Our collective greater mission is to inspire the entrepreneurial spirit to thrive.

We hope you take the opportunity to share in this experience and to contribute to its collective success and the success of the teams that compete for its top prizes.

Sincerely,

Manav Subodh
Global Manager
Entrepreneurship & Innovation
Corporate Affairs
Intel

Andre Marquis
Executive Director
Lester Center for Entrepreneurship
Haas School of Business, UC Berkeley

About the Challenge

The Intel Global Challenge at UC Berkeley is a global competition for technology entrepreneurs. It was founded in 2005 through a collaboration between UC Berkeley and Intel with the broad mission to support and promote entrepreneurship globally and more specifically in developing countries.

The Challenge showcases business opportunities with the greatest potential for a positive impact on society through the commercialization of new and truly innovative technologies. We focus on business plans that make integral use of novel technology, such as:

- **Semiconductors, Manufacturing, and Hardware**
- **Mobile and Wireless**
- **Digital Home and Consumer Electronics**
- **Retail and Consumer Software**
- **Enterprise Software and IT**
- **Energy and Power Generation**
- **Nanotechnology**
- **Life Sciences and Biotechnology**

While the scope of technology innovation is not restricted to the above, plans without a strong technology focus may not be chosen to compete.

Entrants are drawn primarily from partnerships that the Challenge has developed with reputable local and regional business plan competitions. Those partners nominate the best technology entries from the winners of their respective competitions to enter the Challenge. Upon nomination by a Challenge partner, teams will submit and present their business plans for review by the Challenge judging committee. The judging committee will not be biased toward plans that generate the highest financial return, however a requirement for entry is that the proposed businesses can achieve a positive return within their proposed investment timeframe.

The Challenge judges its finalist teams on broad criteria but are strongly influenced by the entrepreneur's ability to make the greatest impact through the deployment of new technology. Emphasis is placed on emerging and innovative technology products and services, which have a high likelihood of generating significant benefits for all stakeholders, both investors and the broader industry ecosystem. Judges are selected from Bay Area venture firms and Intel Capital with a global focus.

Awards:

All participating teams will benefit from the education provided, introductions to potential investors, publicity, and feedback from industry experts that occur at the Challenge. However, cash prizes will be awarded to the top ranked teams:

First Place:	**$50,000**
Second Place:	**$20,000**
Third Place:	**$10,000**
People's Choice:	**$5,000**
Social Innovation:	**$5,000**
Young Innovator:	**$5,000**
Emerging Impact:	**$5,000**

The **People's Choice Award** is open to the public and voting will be done online. This award is designed to extend the reach of the Intel Global Challenge beyond the walls of UC Berkeley and enable the public, along with friends, families, and colleagues, to vote for the team they feel is most innovative, has the most potential to positively change our world and succeed as a business venture. While the People's Choice Awards have no bearing on the Challenge, the winner of the award will receive a cash prize of $5,000. The People's Choice Award will be hosted on InspiredbyEducation.com. Voting will begin on Friday, November 11 and close on Friday, November 18.

New for 2011 are three Special Awards, also with a cash prize of $5,000. These three awards will be selected during the Semi Finals judging process and announced at Wednesday's Celebratory Dinner.

Social Innovation Award

The venture that has the strongest positive social value proposition shown by measurement of social impact to the local, regional, or global community. The venture or idea may not have high financial returns, but should be supported by a scalable business model.

Young Innovator Award

An award for a strong student team with the most innovative idea that is backed by a scalable business model. The venture and team should show great potential, but may not yet have a first customer.

Emerging Impact Award

An award for the team with the most innovative idea from or for an emerging market that is backed by a scalable business model. The venture and team should show great potential, but may not yet have a first customer.

For more information about the Challenge, please visit the website: www.entrepreneurshipchallenge.org.

Intel Corporation and the Intel Foundation

Intel is committed to enabling innovation and economic development by providing entrepreneurship education and building entrepreneurial spirit in collaboration with universities, governments, industries, and NGOs around the world.

Intel's commitment to education extends far beyond the Intel Global Challenge at UC Berkeley. Over the past decade alone, Intel has invested more than $1 billion, and its employees have donated more than 3 million hours toward improving education in 70 countries. To learn more about the Intel Education Initiative, visit **www.intel.com/education.**

** Funded by the Intel Foundation*

Lester Center
for Entrepreneurship

Haas School of Business, University of California, Berkeley

The Lester Center for Entrepreneurship is the primary locus for the study and promotion of entrepreneurship in management and new enterprise development at UC Berkeley. We serve the entire campus community of entrepreneurs and innovators through our classes, forums, services, and networks.

We owe our creation to the vision and generosity of Howard Lester, the founder of one of the world's most respected and innovative retail enterprises, Williams-Sonoma, Inc., and a distinguished business leader. Our central mission "Education for Venture Creation" provides guidance for our activities and embodies a virtuous cycle that begins with education and is completed when our students return to help educate others. That cycle recognizes that today's students could be today's entrepreneurs, but more likely will form and lead companies in the future. We strive to both encourage and amplify innovation across our expanding portfolio of programs here at Berkeley and abroad to address pressing problems and to better our human condition.

We inspire, celebrate, collaborate, and challenge entrepreneurs and innovators across five domains: technology-based entrepreneurship, new venture financing, social entrepreneurship, corporate entrepreneurship and innovation, and regional entrepreneurship acceleration. Our efforts are recognized nationally and internationally as one of the best in the world and we are inspired to do more.

Key Programs and Events at the Lester Center:

- The **Berkeley Entrepreneurs Forum** is the Center's flagship networking event and speaker's series that provides an informative and stimulating setting for students and the public to meet with and hear from seasoned professional entrepreneurs.
- The **Entrepreneurs Association** is the primary student organization that creates and fosters a dynamic entrepreneurial environment for its members by providing innovative opportunities, meeting forums, and resources at Haas and across the Berkeley campus.
- The **UC Berkeley Business Plan Competitio**n serves as the convergence point for entrepreneurs across the greater UC Berkeley community.
- The **Global Social Venture Competition**, founded at Haas, is the largest student-led social venture competition in the world with 14 partner schools in the US, Europe, Asia, and Africa.
- The **Berkeley Entrepreneurship Laboratory** at Skydeck Innovation Center provides an intense educational and operating environment where real companies formed by Berkeley students, alumni, faculty, and researchers can rapidly work through their experimental phase, form, and flourish.
- The **Entrepreneurs Corner** gives students the opportunity to meet with successful Bay Area entrepreneurs, venture capitalists, and lawyers to discuss business ideas and career goals.

To learn more about our programs, please feel free to contact us directly at lester@haas.berkeley.edu or to visit our website, entrepreneurship.berkeley.edu.

Partner Competitions and Programs 2011

Arab Technology Business Plan Competition

Business of Innovation and Technology (BIT) – Russia

JA-YE Enterprise Challenge Europe

Intel-DST Asia Pacific Challenge

Intel Challenge Latin America

Global Social Venture Competition

Intel Challenge Europe (Western and Eastern Europe)

Intel China Entrepreneurship Bootcamp

Next Big Idea – India

Queen Rania Center for Entrepreneurship – Jordan

Start-up@Singapore

UC Berkeley Business Plan Competition

2011 IDEAS Show – Taiwan

METUTECH "New Ideas New Businesses" competition – Turkey

Schedule of Events

Monday, November 7 *[UC Berkeley]*

4:00–5:30 PM	Team Registration & Orientation UC Berkeley, Men's Faculty Club
6:00–8:00 PM	Welcome Reception with Dinner Wells Fargo Room, Haas School

Tuesday, November 8 *[Intel Corporation Headquarters, Santa Clara]*

7:30/8:00 AM	Breakfast & Depart for Intel Hotel Durant/Hotel Shattuck Plaza
10:00–11:30 AM	Welcome, Global Entrepreneurship Session Intel Corporation
11:30 AM–1:00 PM	Poster Session (incl. set-up) Intel Corporation
1:00–2:00 PM	Lunch Intel Corporation
2:00–4:30 PM	Practice Pitch Sessions, Intel Museum Tour Intel Corporation
5:00–6:00 PM	Networking Reception Intel Corporation
6:15 PM	Depart Intel for Berkeley

Wednesday, November 9 *[Hotel Shattuck Plaza, Downtown Berkeley]*

9:00–10:00 AM	Breakfast Hotel Shattuck Plaza
10:00 AM–12:00 PM	Semi Finals: Presentations to Judges Hotel Shattuck Plaza
12:00 PM–1:00 PM	Lunch Hotel Shattuck Plaza
1:00–2:30 PM	Semi Finals: Presentations to Judges Hotel Shattuck Plaza
2:30–4:30 PM	Free Time
4:30–5:30 PM	Feedback Session with Judges Hotel Shattuck Plaza
6:00–8:30 PM	Reception & Celebratory Dinner, Finalists & Special Awards Announced Berkeley City Club

Thursday, November 10 *[Haas School of Business, UC Berkeley]*

Morning	Open / Mentoring Session / Finalist Teams Practice Sessions Haas School of Business
11:45 AM–1:15 PM	Lunch Wells Fargo Room, Haas School
12:45–5:00 PM	Finals: Presentations to Judges Koret Classroom (F320), Haas School
5:30–8:30 PM	Poster Session & Reception with Dinner; Finalist Team Presentations, Keynote Speaker & Awards Ceremony at the UC Berkeley Entrepreneurs Forum Bank of America Forum & Andersen Auditorium, Haas School

**All events will take place at UC Berkeley unless otherwise noted.*

Semi Finals Judges 2011

Keith Alexander, Ph.D, Department of Chemical Engineering, UC Berkeley

Keith Alexander is Adjunct Professor and Executive Director of the Product Development Program (PDP) of the Department of Chemical Engineering at UC Berkeley. The PDP is an innovative Master's degree program whose central aim is to fill the unmet need at the national level for chemical engineering graduates who have knowledge and experience in the complex process of transforming technical innovations into commercially successful products. PDP graduates gain exposure to common product development practices in a range of chemical process-intensive industries including biotechnology, consumer products, chemical products, microelectronics, and nanotechnology. Prior to his appointment at UC Berkeley, Keith was a Senior Vice President of CH2M Hill, Inc. CH2M Hill is a $5 billion international environmental engineering and consulting firm headquartered in Englewood, Colorado. He has had over 20 years of experience in new venture start-up, new product development, strategic planning, and change management.

Farshid Arman, Siemens Technology to Business Center

Farshid Arman is currently a Director at Siemens Technology to Business Center (TTB) in Berkeley, California; at TTB Farshid leads the efforts on commercializing new ideas and seed-stage companies with links to the renewable energy divisions of Siemens. Farshid previously held a similar role for the automotive division of Siemens. Farshid's career outside of Siemens includes co-founding a grid-scale energy storage company, system architect at CNN, and director of engineering at an enterprise-scale software company. Farshid has a Ph.D. in Electrical Engineering from the University of Texas at Austin and holds many patents in a variety of fields.

Noah Doyle, Javelin Venture Partners

Noah has founded, launched, and grown dozens of high technology products and companies in 20 years of entrepreneurship and management of innovation. Noah most recently directed the enterprise product line for Google's geospatial products, Google Earth, and Google Maps. Prior to Google, Noah managed the Marketing Strategy and Corporate Development functions at Keyhole, Inc., the venture capital backed company that created the first Web-hosted digital earth model and was acquired by Google in 2004. Prior to Keyhole, Noah helped establish the Internet loyalty rewards marketplace as a co-founder of MyPoints.com, the largest Internet loyalty program with over 6 million active members, where he led product management and business development functions from the company's inception through an initial public offering and subsequent acquisition by United Airlines. Prior to MyPoints, Noah was based in Tokyo where he managed overseas sales and marketing for the OEM channel of Panasonic's graphics communications equipment subsidiary in Japan. In other roles, he was chairman of the management board of UC Berkeley's campus bookstore, a $17 million retail operation, and also held product management and operations management roles at IBM/Rational (Pure Atria) and Oracle. As an angel investor prior to forming Javelin Venture Partners, Noah has supported over a dozen start-ups including Keyhole (Google), Cantametrix (Gracenote), Amae Software (Verint), Nuvon, Ritter Natural Sciences, Emdigo, Magnacash (Yaga), and i-mint India. Noah holds M.B.A. and B.A. Economics degrees, as well as certificates in Management of Technology and Global Management from UC Berkeley and is a recipient of the United States Air Force Fellowship for New Technology in Japan. Noah's board memberships include Nexenta, Queplix, Sociable Labs, Rixty, and Nuvon.

Steve Eichenlaub, Intel Capital

Steve joined Intel Capital in 1998, and sits on the Platform Technologies, Cleantech, and Healthcare investment committees. Steve leads a worldwide team of investment managers driving equity and technology licensing with companies to accelerate the frontiers of technology related to Intel's long-term strategic interests while driving positive financial return. Prior to Intel, Steve worked at Adobe Systems and Mentor Graphics, and at start-ups Silicon Compiler Systems and GammaMetrics, across a variety of roles spanning venture investing, M&A, business development, strategic and product marketing, sales, and investor relations. He holds a B.S. in Electrical and Nuclear Engineering from UC Berkeley, and an M.B.A. from Harvard Business School.

Cheryl Fragiadakis, Lawrence Berkeley National Laboratory

Cheryl heads Technology Transfer and Intellectual Property Management at the Lawrence Berkeley National Laboratory, which is operated for the Department of Energy by the University of California. Berkeley Lab conducts unclassified research and development in multiple disciplines including chemistry, biology, physics, energy efficiency, materials, engineering, and computer science. Technology Transfer is responsible for industrial collaborations, patents, copyrights, licensing, marketing, and business development. Under her leadership, the department has licensed technologies resulting in 30 start-up companies, and has managed over a hundred research collaborations between private companies and the Berkeley Lab. Before joining the Lab, she spent over 10 years working in the private sector for a major oil company. She has served on the Steering Committee of the Bay Area Science Infrastructure Consortium, and the Executive Committee of the DOE Technology Partnerships Working Group. She currently is Chair of the DOE Technology Transfer Working Group, a member of the systemwide University of California Technology Transfer Advisory Committee, and serves on the Board of Directors of BERC (Berkeley Energy Resources Collaborative). Cheryl has a B.S. in Chemical Engineering from the Colorado School of Mines and an M.B.A. from the UC Berkeley Haas School of Business.

Steve Hahn, The Dow Chemical Company

Steve joined Dow in Midland, Michigan in 1982 and has worked in a variety of business and corporate research functions at Dow prior to assuming his current role in 2007. As Research Fellow, Steve leads Dow's effort to identify emerging, strategically aligned chemical, materials and energy related business opportunities. He is currently focused on the US West Coast region and is located in San Francisco/Silicon Valley. Steve has a B.S. in Chemistry from Michigan Tech and an M.S. in Chemistry from Central Michigan University. He holds 35 issued U.S. Patents, has 40 publications in refereed journals, and six chapters in text /reference books. Steve was named a Dow Inventor of the Year in 1990 and 1996, the Distinguished Alumni Lecturer at Michigan in 1996 and 2003, and received the Dow Excellence In Science Award in 1999. He was a Visiting Professor at the University of Minnesota in 2000 and has represented Dow on Advisory Boards at the University of Connecticut and Michigan Technological University. He received the American Chemical Society Cooperative Research Award in 2008 and the Council for Chemical Research Collaboration Award in 2010.

Timothy H. Harris, Morrison and Foerster

Mr. Harris heads the Technology Group of the firmwide Emerging Companies and Venture Capital group. In his start-up practice, Mr. Harris advises emerging growth technology enterprises from formation through acquisition or initial public offering in matters including venture capital financing, debt financing, equity incentive compensation, and technology development. He also represents venture capital firms, strategic corporate investors, and angel investors in their investments in start-up companies. Mr. Harris represents start-ups and investors in a variety of technology sectors, including cleantech (energy efficiency enterprise software, high efficiency solar modules, scalable consumer grade wind turbines), Internet, software, semiconductor, medical device, and financial services industries. Prior to practicing law, Mr. Harris designed, programmed, and implemented software systems for clients in the financial services industry. Mr. Harris was an Associate Editor of the Law Review and was elected to Order of the Coif at Northwestern University School of Law.

Matt Kirmayer, Lowenstein Sandler LLP

Matt is a Member of the firm at Lowenstein Sandler and a member of its Tech Group in Palo Alto. Matt enjoys the excitement of working with new technologies and the entrepreneurs that develop and bring those technologies to market, and focuses his practice on the representation of emerging technology companies, venture capital and private equity funds, and institutional investors. He represents clients in many industries, including digital media, clean technology, and renewable energy, Internet infrastructure and security, nanotechnology, life sciences, and medical devices. When working with emerging growth companies, Matt often serves the role of general counsel, advising on formation, assisting with introductions to, and negotiations with, angel and venture capital investors and, when it all works to plan, an IPO or sale transaction. Matt has practiced corporate law for more than two decades, and has worked on hundreds of financings, IPOs, and M&A transactions. In addition to enjoying the breadth and depth of the entrepreneurial and financing world in Silicon Valley, Matt takes advantage of his roots in NY City and the firm's leadership position there, and maintains an active practice counseling companies in the Northeast, particularly those seeking access to venture capital on the West Coast.

Todd Morrill, Venture Management Group

Todd is the Managing Director of Venture Management Group, where he consults with private equity and strategic buyers on M&A opportunities, helping with target identification, due diligence, and negotiation/acquisition. Previously, he ran the worldwide M&A and Licensing organization for Life Sciences at Bio-Rad Laboratories, a $2.6 billion manufacturer of diagnostic tests and equipment, and research tools. He also served as CEO of IO Informatics, CBO at Trellis Biosciences, and prior to that, executive positions in pharma, investment banking, and manufacturing companies. Todd has 25 years of experience in building and leading diagnostics, biopharma, and a variety of life science organizations. He has built companies and teams as CEO, President, Executive VP, Chief Business Officer, and Managing Director. His responsibilities have included executive management, M&A, business development, R&D, and corporate venture management, and he served as Chairman for one, and as a Board member for three biotech companies. Todd has taught at the Haas School of Business, UC Berkeley, where he is a Richard H. Holton Teaching Fellow.

Dushyant Pathak, VentureEdge LLC

Dr. Dushyant Pathak is President of VentureEdge LLC. He is an EIR at Mission Bay Capital and an Adjunct Professor at University of San Francisco's Graduate School of Management. He has held leadership positions (including President and CEO) at listed and private companies including Chiron, Arris, BioProtocol, Renovis, Cellexicon and iPierian. At Renovis, he led business development and clinical/IND project operations and was part of the team responsible for its IPO. In addition to leadership at clinical-stage companies, Dushyant has led companies at the start-up stage from business plan and initial capital raise onwards. Most recently he was Vice President of Business Development at iPierian helping lead a merger and raise two rounds of venture capital. Prior to iPierian, Dushyant was President/CEO of Cellexicon, a molecular diagnostics start-up. Dushyant received his M.B.A. from the Haas School of Business and his Ph.D. from Northwestern University. He was on the Research Faculty at Yale University prior to initiating his business career in venture capital at Connecticut Innovations. Dushyant has taught in the full-time and executive M.B.A. programs at Haas, where he was also an EIR at the Lester Center for Entrepreneurship & Innovation. He is on the Board of Directors of Visionary Pharmaceuticals and Creativity Explored.

Sarah Peach, Siemens Technology-to-Business Center

Sarah Peach is Director of Venture Technology at Siemens Technology-to-Business (TTB) Center, based in Berkeley, California. At Siemens TTB, Sarah is responsible for turning early-stage innovations from start-ups and universities into viable business opportunities for Siemens' Industry Sector business units. Her primary focus is industrial infrastructure, including all aspects of manufacturing, factory automation and control, and energy efficiency, and further interests include building technology and lighting. Before joining Siemens in 2006, Sarah was Director of New Initiatives at the University of California's Industry-University Cooperative Research Program. She has directed business development at optics start-up Chelix Technologies, and previously managed the technical team and business development activities at Chelix's parent company, Reveo, Inc.. She also worked in polymer research at BASF AG in Germany. Sarah holds a Bachelor's degree from Oxford University and a Ph.D. from Cornell University, both in physics.

Venu Pemmaraju, Intel Capital

Venu joined Intel Capital in 2000. Prior to Intel Capital, Venu was Product Marketing Manager at Synopsys. Before that Venu worked at Mentor Graphics as a Technical Marketing Manager and at CAD Language Systems, Inc. as Director of Engineering. He currently serves as board observer for CloudMade, Concursive, CrowdStar, Fonality, Kaltura, and Sendmail. Venu led investments in and managed exits for OpenFeint (acquired by Gree), Platform Solutions Inc. (acquired by IBM), MySQL (acquired by Sun Microsystems), and TimesTen (acquired by Oracle). Venu has a B.S. from Indian Institute of Technology (Kharagpur), an M.S. from University of Houston, and an M.B.A. from University of Chicago.

Anthony Raymundo, Lowenstein Sandler LLP

Anthony is a venture lawyer with the Tech Group at Lowenstein Sandler LLP where he specializes in venture capital transactions and angel investments as well as mergers and acquisitions involving venture-backed companies. In his practice, Anthony represents several prominent venture funds in Silicon Valley. He also counsels many start-ups and entrepreneurs regarding formation and operational matters, as well as venture finance. Prior to joining Lowenstein Sandler, Anthony was a corporate attorney in San Francisco, where he represented a diverse client base ranging from start-ups to large public and private corporations in all aspects of general corporate counseling and complex corporate transactions, with particular focus on mergers and acquisitions, private equity financings, and securities. Anthony earned his law degree from Stanford Law School. In his time away from work, Anthony enjoys photography and high performance driving.

David Riemer, Executive-in-Residence, Haas School of Business

David Riemer is one of the most experienced marketers in the Internet industry. He has spent 15 years developing and bringing great products to web users worldwide. Following his career as an ad agency President at JWT, David brought his strategic and marketing leadership to two Internet start-ups before joining Yahoo! in 2002. In various roles over six years at Yahoo!, David led the marketing teams on both the business-to-business and consumer sides of the business where he managed marketing for virtually all of Yahoo!'s products across their customer base of 500 million users. David is now advising emerging Internet and consumer technology companies through his new company Box Out Industries. He specializes in helping businesses clarify their product strategy, go-to-market approach and business model. David also started a production company (Spiral Staircase) to produce theatrical projects. David mentors future business professionals in his role as Executive-in-Residence at Haas School of Business (UC Berkeley) and serves on the Board of the Destiny Arts Center (Oakland) and the American Conservatory Theater (San Francisco).

Natasha Skok, Tallwood Ventures

Natasha focuses on operations at Tallwood as well as with portfolio companies. She has 20 years of experience in leading organizations and establishing processes in product and program management at innovative companies from a variety of industries, including semiconductors, consumer electronics, and scientific instruments. Prior to joining Tallwood, Natasha's most recent position was General Manager of the Audio division of SONICblue. Before that, she was VP of Business Operations at ReplayTV, where she established operations from the ground up, including manufacturing, supply chain, distribution, and customer care. Earlier, at S3, she established project management practices and managed key projects. Natasha holds a B.A. in Chemistry from UC Santa Cruz and an M.B.A. from UC Berkeley.

Andrew Williamson, Physic Ventures

Andrew Williamson is a Partner at Physic Ventures, a San Francisco based Venture Capital firm investing in Health and Sustainability. Andrew's investment practice is focused on companies developing technologies, products, and services that enable consumers to adopt more sustainable lifestyles. He is interested in companies developing renewable energy and energy efficiency solutions, green building technology, water technology, and bio/sustainable materials. Among the investments managed by Physic Ventures, Andrew is a member of the boards of Chromatin, EnergyHub, Gazelle, Impinj, Novomer, Recyclebank, and WaterSmart. Prior to joining Physic Ventures, Andrew spent 10 years leading materials science research at the Department of Energy's National Renewable Energy Laboratory and Lawrence Livermore National Laboratory. Andrew has published over 50 papers and 2 patents. He holds a B.A. and Ph.D. in Physics from the University of Cambridge and a M.B.A. from the Haas School of Business at UC Berkeley.

Finals Judges 2011

Keval Desai, Interwest Partners

Keval Desai is Partner at Interwest focusing on investments in Internet and mobile. Earlier, over a 20-year period in Silicon Valley, Keval held operating roles at Google, Digg, Achex, McKinsey, Global Village Communication, and Tandem Computers. His prior investment experience includes ONSET Ventures and Morgan Stanley Venture Partners. Keval is on the Dean's advisory board at UC Berkeley's Haas School of Business and co-founded the UC Berkeley Business Plan competition.

Randy Hawks, Claremont Creek Ventures

Randy is a Managing Director at Claremont Creek Ventures, bringing more than 25 years of technology industry experience as a senior general manager and venture investor to the group. Randy invests in Information Technology and has a special interest in Sensor Networks and Security. In the years prior to co-founding Claremont Creek Ventures, Randy was a General Partner at Novus Ventures and a Venture Partner at Horizon Ventures. Before his venture capital career, Randy had start-up experience as CEO at Captiva Software and as COO at Identix (from its founding through IPO and life on NASDAQ). He served as Senior Vice President at AT&T Paradyne and as a Vice President of Marketing and Division General Manager at ITT Information Systems (Qume). Early in his career, Randy served in a variety of roles in the minicomputer business at Texas Instruments and began work as a computer research engineer at Cornell Aeronautical Lab. Prior investments include Inapac, Invivodata, Identix, Flytecomm, View Central and Be Here. Randy holds a BSEE from University of Arkansas and has completed the Stanford University Executive Management Program. He serves as a Committee Chair for Keiretsu Forum and is a member of the US Secret Service Electronics Crime Taskforce.

Jay Jamison, BlueRun Ventures

Jay Jamison is a Venture Partner who joined BlueRun Ventures in November 2010 and is based primarily in Menlo Park. He focuses on early stage mobile, consumer, and enterprise opportunities. Jay has twelve years of product management and marketing experience in the software and Internet industry. Previous experience includes leading Microsoft Japan's Windows Business Group as Senior Director and other senior level roles at Microsoft in product management and marketing. Jay also successfully founded and led Moonshoot, a venture backed online English education service for children. Jay is a popular speaker on topics of entrepreneurship and building businesses. He has been a featured speaker at the Start-up Digest University, the Hacker Dojo, and the Founders Showcase. He is also a Mentor at the Founders Institute. Jay's companies include: AppCentral, AppRedeem, Foodspotting, and Opinionaided. He is also a Parisoma VC Resident. Jay received his M.B.A. from the University of Pennsylvania's Wharton School of Business and holds a B.A. from Duke University.

Carey Lai, Intel Capital

Carey Lai is an Investment Director at Intel Capital focused on Internet and Digital Media investments. Carey joined Intel Capital from Institutional Venture Partners (IVP) where he was a Vice President focused on fast growing later-stage investments. While at IVP, he served on the board of MotoSport.com and led investments in both Synchronoss (SNCR) and ConnectAndSell. Other investments Carey actively participated in include ArcSight (HPQ), Business.com (DEXO), Concur (CNQR), Danger (MSFT), Data Domain (EMC), HomeAway (AWAY), Mobile365 (SAP), and SuccessFactors (SFSF). Carey also worked in the Technology Investment Banking Group at Banc of America Securities as a Financial Analyst focused on the Software and Financial Technology sectors. His transaction experience included offerings for some of the leading technology companies in the country, including Blackbaud Software (BLKB), Computer Associates (CA), Hewlett Packard (HPQ), Sungard Data Systems (SDS), and Tibco Software (TIBX). Earlier in his career, Carey worked at PricewaterhouseCoopers focused on the Software sector as well as at eBay in Business Development. Carey holds an M.B.A. from the Wharton School of Business at the University of Pennsylvania and a B.A. in International Economics from the University of California Los Angeles.

Laura Oliphant, Intel Capital

Laura joined Intel Capital in 2001. Prior to Intel Capital, Laura was one of the coordinators for Intel's transition to 300 mm fabs. Her role was to manage tool selection activities for the metrology and lab areas, in coordination with the major equipment suppliers. In 2000, Laura was the industry co-chair for the SEMATECH Metrology and Yield Management Tools Program Advisory Group. Laura joined Intel in 1991 as a Process Engineer, where she developed a lithography technology that is currently used in Intel's mobile processors. While in process engineering, she also worked in yield issues. In 2006, Laura received the Intel Achievement Award, Intel's highest award, for her investing activities. In 2008, Laura was a judge for the finals of the Berkeley Business Plan Competition. Laura is currently board observer for Crossing Automation, Xradia, and Advanced Inquiry Systems. She also invested in and managed exits for ALIS (acquired by Zeiss), Angstron Systems (acquired by Novellus), and Lotes (IPO on the Taiwan Stock Exchange). Laura holds a Ph.D. in Chemical Engineering from the University of California at Berkeley.

Eghosa Omoigui, EchoVC Partners

Eghosa Omoigui is founder of EchoVC Partners, a Silicon Valley-based early stage tech VC firm. He invests in dots before they become lines and loves to partner with tech entrepreneurs mounting daily assaults on conventional wisdom. Before this, Eghosa was with Intel for nearly 10 years and his last role was as Intel Capital Director, Strategic Investments, Consumer Internet and Semantic Technologies, where he acted as a senior investment professional focused on platform-agnostic consumer web services and digital media-based investment opportunities. Omoigui also drove ICap's investment focus on next generation semantic technologies and the real-time web. Prior to this role, Omoigui was Chief of Staff to the President of Intel Capital and Chief of Staff for Intel's Treasury organization. Omoigui attended UPenn Law School and Olin Graduate School of Business at Babson College. Representative investments include GraphScience, Dekko, Stipple, TinkerCAD, Retailigence, SpeakerText, LocBox, Frid.ge (acquired by Google), Betaworks, Sense Networks, Voxify, Yatra, BuzzInTown, and Cerebra. Eghosa is an advisor to ASTIA and SIBOS-Innotribe.

Ron D. Reich, Intel Capital

Prior to joining Intel Capital in 1999, Ron was Vice President of Business Development at Brightpoint Inc, a $2 billion logistics provider to cellular network operators worldwide. From 1994 to 1997, Ron was a Senior Associate in the Communications, Media, and Technology practice at Booz Allen and Hamilton where he led a variety of strategic and operational consulting engagements. Since joining Intel Capital, he has led or co-led investments totaling in excess of $200 million in wireless companies. Ron is a board observer for Freedom4 (UK), Hellosoft, iBAHN, Trillion Partners, Tropos, and WorldMax (Holland). He has also invested in and managed exits for Interpacket Networks, Japan Telecomunications, Nomadix, and Clearwire. Ron completed an M.B.A. at the Wharton School, where he was recognized for academic distinction. He has a B.S. with high honors from the School of Engineering at University of California at Berkeley.

Camille D. Samuels, Versant Ventures

Camille Samuels specializes in early-stage biotechnology investing at Versant. Cami brings 14 years of venture capital and operating experience to her portfolio companies. She enjoys helping talented entrepreneurs build exceptional companies. Cami joined Versant in early 2000, shortly after its formation. Prior to Versant, she was responsible for business development at Tularik, Inc. (subsequently acquired by Amgen) where she in-licensed two of the company's clinical-stage products and led Tularik's Technology Acquisition Group. Before Tularik, Cami worked in corporate development at Genzyme and Millennium Predictive Medicine, and was a management consultant to healthcare and biotech companies at LEK Consulting. Cami currently serves as a board member of the following companies: Achaogen, APT Pharmaceuticals, Kythera Biopharmaceuticals, and Semprae Laboratories. Cami was previously a board member of Transcept Pharmaceuticals, Inc. (TSPT), a public company, and NovaCardia (acquired by Merck) and ParAllele (acquired by Affymetrix). In addition, she served as a board observer at several companies, including Alexza (public), Fluidigm, Genomic Health (public), and Syrrx (acquired by Takeda). Cami earned her Bachelor's degree in Biology from Duke University and an M.B.A. from Harvard Business School, where she graduated as a Baker Scholar. In 2002, The Aspen Institute named Camille a Henry Crown Fellow.

Keynote Speaker, November 10, 2011

Genevieve Bell

Intel Fellow, Intel Labs Director, Interaction & Experience Research
Intel Corporation

Dr. Genevieve Bell is an Australian-born anthropologist and researcher. As director of User Interaction and Experience in Intel Labs, Bell leads a research team of social scientists, interaction designers, human factors engineers, and computer scientists. This team shapes and helps create new Intel technologies and products that are increasingly designed around people's needs and desires. In this team and her prior roles, Bell has fundamentally altered the way Intel envisions and plans its future products so that they are centered on people's needs rather than simply silicon capabilities.

In addition to leading this increasingly important area of research at Intel, Bell is an accomplished industry pundit on the intersection of culture and technology. She is a regular public speaker and panelist at technology conferences worldwide, sharing myriad insights gained from her extensive international field work and research. Her first book, "Divining the Digital Future: Mess and Mythology in Ubiquitous Computing," was co-written with Prof. Paul Dourish of the University of California at Irvine and released in April 2011. In 2010, Bell was named one of Fast Company's inaugural "100 Most Creative People in Business." She also is the recipient of several patents for consumer electronics innovations.

Moving to the United States for her undergraduate studies, she graduated from Bryn Mawr in 1990 with a bachelor's degree in anthropology. She then attended Stanford University, earning her master's degree (1993) and a doctorate (1998) in cultural anthropology, as well as acting as a lecturer in the Department of Anthropology from 1996-1998. With a father who was an engineer and a mother who was an anthropologist, perhaps Bell was fated to ultimately work for a technology company, joining Intel in 1998.

Intel Global Challenge Participating Teams – 2011

ALGAN K.K. Kyoto University, Japan

aQuainnova Sasin Graduate Institute of Business Administration, Thailand

ARound (NeurON) Gdansk University of Technology, Poland

Bife National University of La Plata, Argentina

BioPaint, Inc. University of California, San Francisco, USA

BUCKY'o'ZUN Aarhus University, Denmark

CeelBio Federal University of Minas Gerais, Brazil

EXOMAN Saint-Petersburg State Polytechnical University, Russia

FLICKS University of Porto, Portugal

Forward (Gaitu) Wuhan University, China

Herbatica ELPM (Lyon, France), Lebanon

Kaleidoscope Turkey

KidBox Universidad ORT, Uruguay

Lapatronix De La Salle University, Philippines

Lifeware S.A.C. Universidad Technica Federico Santa Maria, Chile

MATE Sichuan University, China

Maxygen-mobile DNA tests Lomonosov Moscow State University, Russia

MicroMed IIT Kharagpur, India

NanoDiagX American University in Cairo, Egypt

NextDrop University of California, Berkeley, USA

Nitrate Production System Queen Rania Center for Entrepreneurship, Jordan

Now.in Feng Chia University, Taiwan

Object Guidance (QualityMonitor) University of Chile, Chile

OdBoards Universiti Utara Malaysia, Yemen

Photo-Genie Technion, Israel

PolySol India

Russian3DScanner Voronezh State University, Russia

TruthTech Tsinghua University, China

Valley Feed American University of Beirut, Saudi Arabia / Lebanon

WeDecide Denmark

ALGAN K.K. Kyoto University, Japan

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The damaging effects of ultraviolet (UV) radiation on humans—skin cancer, wrinkling, age spots, and vision loss—have long been known. But just how damaging the effects are at a particular time and location, as measured by an international standard known as the UV Index, has been difficult to calculate without large monochrometers and other digital processing equipment. The innovators of ALGAN K.K. have developed a completely new photo-detecting technology to measure the UV Index using tiny, brooch-like sensors instead of bulky monochrometers. The company is now constructing sensor networks, linked to weather forecast systems, which will enable the visualization of topographic images of the UV Index. ALGAN K.K.'s goal is to forecast the dynamics of the UV Index and ozone holes worldwide, giving people the information they need to reduce radiation exposure and risks from UV in their daily lives.

aQuainnova Sasin Graduate Institute of Business Administration, Thailand

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Shrimp farmers everywhere will appreciate aQuainnova, a team of entrepreneurs from Thailand. Early detection and identification of viral diseases is a key to preventing massive losses on the farms where shrimp are raised. aQuainnova plans to produce and market Genovex, a portable diagnostic tool with reagents specific for different shrimp viruses. The highly sensitive, user-friendly device provides superior laboratory-accurate identification of viruses more quickly and cheaply than other detection products on the market. As a result, viruses can be contained early, and shrimp farmers can avoid economic loss. aQuainnova initially plans to target the massive shrimp industry in Thailand, where the market size for viral detection devices is estimated at $60 million (U.S.). The young entrepreneurs also have their eyes on the total $304 million international shrimp virus detection market—including Vietnam, Indonesia, and China, where shrimp production has been seriously impacted by recent viral outbreaks.

ARound (NeurON) Gdansk University of Technology, Poland

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Imagine placing an object into your surroundings. Imagine making that object move, rotate, and disappear. That's what The ARound team aims to do—turn imagination into augmented reality (AR) with a product called NeurON. NeurON will combine software with an electroencephalographic (EEG) headset and AR eyeglasses. NeurON users will be able to control virtual content that will appear on the glasses or a computer monitor using their thoughts, emotions, and facial expressions. ARound founders envision multiple applications for the product, including gaming, where players will be able to use their minds to place virtual content on top of their real worlds. The ARound team has built an AR engine, and is now preparing a prototype that incorporates the EEG headset.

Bife National University of La Plata, Argentina

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Highly complex computing tasks—like climate simulations, pharmaceutical testing, or risk assessments—require tremendous amounts of computing power. Completing such tasks on a typical desktop or laptop could take hours, days, or weeks. While working as an experimental physicist, one of the founders of Bife experienced firsthand the delays caused by lack of access to high-performance computing resources. He talked about the problem with colleagues, and they came up with an innovative way to provide personal supercomputing power at a reasonable cost. The Bife team uses the term "bothware" to describe their personal supercomputing product, which combines hardware and software. The solution is based on highly optimized processor architecture designed by Bife that can be reconfigured for each application. The use of the reconfigurable technology enables Bife to offer supercomputing power in a package the size of an external hard drive, making it truly portable and personal.

BioPaint, Inc. University of California, San Francisco, USA

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Test-tube analysis of blood drawn from a heart attack victim gives useful—but not necessarily complete— diagnostic information. BioPaint, Inc. helps physicians measure clotting as it occurs in blood flowing through the cardiovascular system, revealing a more accurate picture of what is occurring in a patient's body in real time. BioPaint achieves this breakthrough with its CardioPaint technology, which enables physicians to "paint" sites in the body using a non-toxic, non-interfering agent, and then view what is happening in the cardiovascular system using the biomedical imaging equipment available in most hospitals. The entrepreneurs of BioPaint aim to use CardioPaint technology to improve the existing diagnostic algorithms and current standard of care for millions of patients who have heart attacks and other cardiovascular diseases. They also plan to apply the technology to gain fundamental insights into the creation of next-generation treatment agents.

BUCKY'o'ZUN Aarhus University, Denmark

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The entrepreneurs of BUCKY'o'ZUN initially wanted to cure skin cancer, but instead came up with a product to help prevent the disease altogether. Their unique chemical compound provides continuous protection against 99.99 % of all UV-radiation at a lower price than other formulations on the market. The compound can be added to sun lotions, anti-aging creams, and hair-care products, helping to protect humans from the damaging effects of the sun. It can also extend the life of paints, car coatings, plastics, awnings, clothing, leather, and other products by helping to prevent fading and decomposition caused by solar radiation. The project began while the inventors were still in high school, and rapidly turned into a serious business with external financing, patent applications, and contacts with researchers around the world.

CeelBio Federal University of Minas Gerais, Brazil

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Dental implant surgery often involves an autograft, through which the jawbone is augmented by adding bone harvested from another site in the patient's body. The addition of the second surgical site generally means more discomfort and expense for the patient. CeelBio founders plan to market an advanced form of bioglass, a biomaterial that can be used instead of natural bone to promote bone regeneration. Bioglass reacts with blood plasma, inducing bone formation, and is naturally absorbed by the body until it is completely replaced by the patient's own bone tissue. CeelBio's exclusive version of bioglass can incorporate controlled release drugs such as antibiotics, growth factors, and anti-inflammatories. The incorporation of complementary drugs is possible because of its own innovative, low-energy synthesis process.

EXOMAN Saint-Petersburg State Polytechnical University, Russia

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People equipped with EXOMAN may not be able to leap tall buildings in a single bound, but they can take on superhuman-like strength. Drawing inspiration from science fiction books and computer games, team EXOMAN has developed a powered exoskeleton that humans can wear to enable them to carry heavier loads. The exoskeleton has a simple, modular design (e.g., hand and foot modules can be licensed), a long running time, and a larger load-carrying capacity than other solutions currently available. EXOMAN entrepreneurs envision military, emergency management, and construction industry applications for the exoskeleton machine. In the case of a building collapse, for example, timely clearing of debris is critical to saving the lives of people trapped inside. EXOMAN entrepreneurs estimate that rescue workers equipped with exoskeletons would be able to clear obstructions in a third less time than those without.

FLICKS University of Porto, Portugal

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Unchecked wildfires can cause devastating loss of life, property, and biodiverse habitats, while spewing greenhouse gases, particulate matter, and other pollutants into the atmosphere. To help keep small wildfires from becoming major disasters, FLICKS has developed an advanced fire prevention system that not only detects wildfires early, but also provides critical information about how to contain them effectively. The solution has autonomous detection units that share information wirelessly and an integrated expert decision system based on neural networks that helps determine the best routes and equipment needed to fight a fire. The FLICKS innovative solution is designed with reliability and scalability in mind, and has detection units suitable for a variety of environments from forests to industrial parks. The fire prevention system is part of the FLICKS team's plan to become a global leading provider of technology solutions that protect the environment and build more sustainable communities. FLICKS, for a greener planet!

Forward (Gaitu) Wuhan University, China

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Gaitu enables consumers to add special effects to photos without expensive, difficult-to-use photo-editing software. Gaitu is an integrated, e-commerce platform for the Chinese market that matches people who have image processing needs with designers who provide those services. Customers simply upload photos to the Gaitu site, and designers do the rest. Gaitu also provides image-sharing services, and taps into the derivatives market by enabling people to turn their edited photos into oil paintings or have them printed on mugs or other merchandise. In addition, Gaitu offers design services, such as business card and logo design, and integrates printing and logistics resources to provide online printing. In the end, Gaitu will simplify every aspect of image processing for consumers as the first company in China to offer one-stop service from design through printing.

Herbatica ELPM (Lyon, France), Lebanon

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The founders of Herbatica are specialists in aromatherapy, herbal medicine, and naturopathy. They plan to establish a research and test center, where they will work to advance the understanding of the powerful healing qualities of herbs. They are developing a line of herbal products for consumers in Lebanon and other Arab countries who seek to strengthen their immune systems and keep their skin healthy and young-looking using natural remedies. Among their products are nutritional beverages, foods, and supplements—pickles, jams, peppers, honeys, royal jelly, ginseng, pollen, vitamins, and more—as well as herbal-based skin creams and medicinal oils. Team members carefully track the origin of each plant used in their products, and, unlike herbal products sold in superstores, all Herbatica products are manufactured without preservatives and chemicals.

Kaleidoscope Turkey

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The Kaleidoscope team is developing VeinScreen, a simple, inexpensive hardware and software device used to obtain infrared images and other information about the location and condition of blood vessels. VeinScreen will help phlebotomists locate blood vessels to draw blood, and aid medical personnel performing intravenous procedures. The Kaleidoscope team plans to develop and market additional related devices, such as vein imaging tools that will work with smartphones and tablet computers, enabling remote diagnoses and home care. The devices will enable, for example, telemedicine follow-up for diabetic patients. Another market might be biometric security, as blood vessel patterning offers a better way to identify people than iris or fingerprint technologies. In addition, the Kaleidoscope team is also designing an infrared colonoscope, which will be safer and more accurate than the tools now used in hospitals.

KidBox Universidad ORT, Uruguay

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KidBox's founders have a mission to keep children safe on the Internet. Working with educational psychologists and teachers, they are developing an application that will serve up existing content—Internet sites, videos, and games—appropriate for children according their age, nationality, interests, and other needs. KidBox will essentially transform a PC into a kid-friendly system with Internet access limited to content personalized for a specific child. The solution will enable parents to set limits on a child's Internet usage (amount of time, hours of use, etc.), and view reports that detail a child's online activities. A scalable interface will enable very young children to access KidBox in a pictorial way; as children acquire reading skills, KidBox will offer a more complete graphical user interface with additional functions. Initial versions of KidBox are being designed for households with children in 15 countries where Spanish or Portuguese is spoken. The company is developing a desktop application, as well as a mobile version for tablets and smartphones.

Lapatronix De La Salle University, Philippines

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Compared to conventional surgical techniques, laparoscopic procedures cause far less trauma to patients, resulting in faster healing and shorter hospital stays. Only three small incisions are made in the patient—one for a tiny camera that serves as the eyes of a surgeon, and two that are entry points for surgical tools controlled by the surgeon externally. One limitation of laparoscopic procedures is the limited movements of the tools involved. Most laparoscopic tools allow only one degree of freedom, so the surgeon must compensate for the lack of movement with his or her arms, often resulting in awkward or painful positions. The Lapatronix team has developed a jointed, articulating laparoscopic tool that offers a more ergonomic handle and four degrees of movement: bending, shaft rotation, tip rotation, and grasping. The Lapatronix instrument designed by Lapatronix has been tested, and feedback has been positive from doctors, who appreciate the enhanced comfort that the device provides.

Lifeware S.A.C. Universidad Technica Federico Santa Maria, Chile

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Social networking. Online classes. Telecommuting. Virtual travel. Computers and the Internet bring a whole new world of possibilities to us, right in our own homes. People with disabilities that prevent them from using a keyboard or mouse, however, may not be able to access those possibilities. The Lifeware S.A.C. team is changing that through software that allows people to control a computer using their brainwaves. The team's LifewareIntegra software works with a neuroheadset device manufactured by another company. The headset captures neck movements and electrical signals produced by the brain. The software essentially translates the captured information into mouse clicks and strokes of an on-screen keyboard, enabling the user to access a computer and its applications. LifewareIntegra currently works as a background desktop application and is compatible with any application supported by the Windows* operating system. The solution has already undergone substantial testing, and has been positively reviewed by several organizations that serve the needs of people with disabilities.

MATE Sichuan University, China

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Recognizing the toll that excessive drinking has on society, entrepreneurs at MATE are working to help people break their addiction to alcohol. Using genetic engineering protein technology, they have developed a way to mass produce the ALDH enzymes that form the basis of an anti-alcohol drug. In the past, ALDH-based drugs have proven quick and effective in the treatment of alcoholism, but have been expensive to produce. MATE's process enables cost-effective production of ALDH, which, in turn, can lower the costs of the drugs that incorporate the enzymes. MATE plans to offer various advanced medical enzyme products produced in an environmentally friendly manner.

Maxygen-mobile DNA tests Lomonosov Moscow State University, Russia

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Infectious diseases and genetic predispositions can be identified by performing DNA tests on a patient's blood or other biological sample. Unfortunately, conventional equipment for DNA testing is expensive, so patient samples must often be sent to centralized facilities where the analysis is performed. The result is added costs and delays in test results. Maxygen has developed a low-cost, fast DNA test solution that can be used at the point of care (POC)—in private medical practices, small and medium-sized medical centers, rural sites, etc. Previous POC DNA-based devices have proven prohibitively expensive and difficult to use, and require 40 minutes or more to yield results. The Maxygen solution incorporates several innovations in both device engineering and DNA testing chemistry that make it portable, inexpensive and easy to use. Medical personnel simply place the biological sample in a disposable Maxygen cartridge, and load the cartridge into the Maxygen test device. The device automatically performs all tests and displays the results within 10 minutes. The Maxygen has been validated to accurately detect most infectious diseases, thousands of predispositions and hereditary diseases, and more than 100 pathogens of farm animals and plants.

MicroMed IIT Kharagpur, India

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Laboratory personnel performing clinical diagnostic tests such as analyzing blood, generally add certain chemicals to body fluids in test tubes or flasks, and then observe the reactions. MicroMed seeks to replace conventional lab analysis with a more efficient, cost-effective process. With the MicroMed solution, lab personnel put the patient's serum and required chemicals at indicated places on a specially designed MicroMed CD, and then mount it to the MicroMed base. The base has a rotating platform that manipulates fluid samples in a rapid, controlled manner. Lab technicians then observe the resulting reactions and prepare the patient's lab report. By automating the chemical reaction process, labs will save time and reduce costs.

NanoDiagX American University in Cairo, Egypt

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The hepatitis C virus (HCV) infects some 200 million people worldwide. Early identification and treatment of infected patients is critical to reducing transmission of the disease, but conventional detection of active HCV generally requires two tests. Using gold nanoparticles, NanoDiagX has developed the HCV nanogold test, which detects the disease in less than an hour at one-tenth the cost of current commercial tests. NanoDiagX expects that the nanogold test will notably improve global efforts to combat the spread of HCV, particularly in parts of the world where infection rates are high, but resources limited. The company also plans to adapt its technology for detection of other infectious agents such as tuberculosis and cancer biomarkers.

NextDrop University of California, Berkeley, USA

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In many parts of the developing world, piped water is available only during unpredictable, intermittent intervals. Local people may spend hours next to taps, waiting and watching for water, and are sometimes forced to purchase water from expensive private suppliers or use water from unsafe sources. NextDrop has developed a solution that saves time and reduces stress for consumers, while enabling utilities to manage water supplies better. NextDrop partners with local utilities, who provide input on their schedules and require that their employees notify NextDrop's interactive voice response (IVR) system when they open water supply valves both at the neighborhood level and one step up in the distribution system. NextDrop uses the data to notify consumers up to an hour before water will be available at nearby taps. The IVR system also enables consumers to provide feedback about water availability back to utilities. The system aggregates all inputs for utility engineers, who can more accurately track the status of valves throughout the community in real time using a web-based dashboard, helping to ensure compliance with set schedules.

Nitrate Production System Queen Rania Center for Entrepreneurship, Jordan

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Some 100 million tons of nitrogen-based fertilizer are produced annually through a process that relies heavily on petroleum byproducts, namely natural gas. As such, fertilizer production generally occurs near oil refineries and its cost is tied to oil prices. Entrepreneurs from Jordan have developed and patented a process for producing nitrate in a water solution, resulting in cleaner, less expensive production and a more natural fertilizer for plants. The water-based Nitrate Production System requires only modest amounts of power, which can be supplied by solar or other green sources of energy. Developers say that production could occur in self-contained, self-operated units that could be purchased affordably by individual farmers, or in strategically located facilities supporting wider geographical areas. In either case, the environmental impact and costs of fertilizer production could decrease, and fewer people around the world might go hungry.

Now.in Feng Chia University, Taiwan

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With Now.in, anyone can become a radio DJ or talk-show host. Would-be broadcasters simply download Now.in software to create their own radio station—avoiding the time-consuming, expensive process of setting up a traditional radio station. Now.in stations are accessible to listeners through the Internet and mobile devices; think of them as "audio blogs" that enable people to talk, tell a story, sing a song, or spread knowledge to others in real-time—making the concept of citizen journalism a reality. The software includes features that measure audience size and enable two-way communication that closely links broadcasters and listeners. During Now.in's first year-and-a-half, people in more than 100 countries created more than 100,000 Now.in radio stations. The company says that the growing popularity of Internet radio—and the advertising opportunities it presents—make now the time to move into the online broadcasting industry.

Object Guidance (QualityMonitor) University of Chile, Chile

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Software engineers may spend years developing complex, custom applications to control a particular company's production line or manage its business functions. Over time, revisions to the software are made and new features are added to keep up with evolving products and business conditions. Maintenance of the software becomes increasingly difficult, time-consuming, and expensive, as the original source code is buried under layers of changes. The entrepreneurs of Object Guidance have developed QualityMonitor to help companies detect and address problems with software. QualityMonitor analyzes applications using corporate programming conventions and delivers visualizations of the internal code, making it easier to perform maintenance and upgrades. A large European auto maker has already successfully used QualityMonitor to identify and address quality issues with the massive software code used to control its production line.

OdBoards Universiti Utara Malaysia, Yemen

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Outdoor billboards are a common way for companies to reach out to customers throughout the Middle East—but finding the right billboards to target specific audiences has been difficult. Some companies resort to sending people to travel throughout the region searching for billboards, and spend a great deal of time and money contacting individual billboard owners to inquire about prices, availability, etc. OdBoards is developing an advanced, online platform to simplify the matching of board owners with advertisers throughout the Middle East. The platform will not only provide information about individual boards (location, size, availability, and pricing), but also about the people likely to view them (age, education, income, gender, and other demographic data). The site will link to satellite maps and include rich graphics that will give advertisers clear and complete information that can be used to develop a targeted marketing plan. OdBoards plans to generate revenue by collecting nominal fees from advertisers, board owners, and advertising agencies.

Photo-Genie Technion, Israel

Info: Photo.Genie@yahoo.com

Looking pale? Having a bad hair day? Missing your supermodel vibe? No problem, with Photo Genie, which makes everybody photogenic. When you're capturing a special moment with your camera, sometimes you have only one shot. Photo Genie will ensure that your one shot becomes a great photograph. Photo Genie is supplementary software/hardware technology that applies computer vision and image processing algorithms to photos of people, making everyone look their best. Your friends and family will still look like themselves—but better—without costly retouching or the use of complex photo editing software. Photo Genie entrepreneurs say that the technology can be built into high-end digital cameras, computers, and mobile devices, and for low-end devices, made available as a cloud service.

PolySol India

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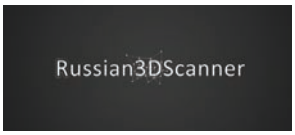
For many people, coconuts invoke thoughts of swaying island palm trees or rich, chewy cookies. But for the entrepreneurs of PolySol, coconuts bring something entirely different to mind: biodegradable polymers. Recognizing the harmful impact that plastics have on our environment, team PolySol has blended coconut husks, starch, and nanomaterials to develop an alternative material for use in packaging, engineered fabrics, consumer goods, personal hygiene products, medical implants, and numerous other industries. In addition to being recyclable, PolySol's patentable polymer decomposes much faster than most plastics, potentially reducing the amount of solid waste in landfills. The polymer is also cost-effective and lightweight, and it provides an excellent barrier to moisture, solvents, and gases. And, because it is based on natural and renewable sources rather than fossil fuels, the polymer may help combat global warming and environmental degradation by preventing emissions of CO_2, greenhouse gases, and volatile organic compounds. PolySol entrepreneurs hope to capitalize on the increasing demand for environmental-friendly materials, noting that the market for biodegradable polymers has shown double-digit growth for several years.

Russian3DScanner Voronezh State University, Russia



Info: Neo307@yandex.ru / www.russian3dscanner.com

Creating a precise, movie-quality 3D image of people or objects generally requires scanning hardware that costs thousands of dollars and is filled with delicate optical equipment. The entrepreneurs of Russian3DScanner have developed an alternative, recognizing that people in many fields—game development, medicine, engineering, etc.—could use an affordable way to create professional-quality 3D models of objects. Russian3DScanner is a software product that enables users to effectively turn ordinary cameras and projectors into 3D-scanning systems. Unlike passive camera-based 3D scanners on the market, Russian3DScanner uses active 3D scanning technology, which yields more precise, complex models that rival those produced by highly paid specialists using professional equipment. Russian3DScanner software comes in versions that support Canon, Nikon, or high-speed machine vision cameras used for scanning human bodies. After installing and calibrating the software on a computer, the user can quickly turn images of objects from these cameras into 3D models. The product is designed to be user friendly, in keeping with the Russian3DScanner entrepreneurs' goal of bringing active 3D scanning technology to everyone.

TruthTech Tsinghua University, China

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What does your finger feel when you launch the birds or slice the fruit while playing the most popular games on iPad? Just a flat, cold surface, but TruthTech's current-simulating haptic technology will end this. Touching it, the world is inside. Touch screen devices currently lack the physical feedback that humans frequently need to fully understand the context of their interactions. TruthTech's current-simulating haptic technology can enhance the user experience through: improved usability, enhanced realism, and restoration of abundant haptic effects. The technology creates fulfilling multi-modal experiences that improve usability by engaging touch, sight, and sound. As a result, Angry Birds will feel more bird-like, as your fingertips will be able to sense the configuration and texture of digital objects on the screen as well as feel the action and nuance of the application. TruthTech entrepreneurs also believe that their technology may someday bring the benefits of latest touch panel devices to people who are blind.

ValleyFeed American University of Beirut, Saudi Arabia / Lebanon

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In a medical emergency, prompt treatment can mean the difference between life and death. The ValleyFeed team aims to shorten the time to treatment by giving paramedics and emergency room personnel immediate access to a patient's medical history and insurance records. ValleyFeed is developing a battery-powered biometric fingerprint scanner that will be used to identify and match a patient to his or her electronic health record. The portable scanner will be linked wirelessly to a nationwide database where the electronic health records are stored. In an instant, emergency medical personnel at an accident scene, in an ambulance, or in an emergency room will be able to view a patient's age, allergies, medications, medical history, and insurance coverage. ValleyFeed founders believe that the solution will not only enable faster treatment, but will also reduce treatment errors caused by lack of knowledge about a patient's medical history. The team is currently seeking patents for the product, and hopes to launch it in Lebanon before expanding to other countries.

WeDecide Denmark

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For most companies, sustained success rests on innovation—a strong stream of new ideas that become profitable products or services. Identifying ideas with the greatest potential, however, can be a time-consuming process involving brainstorming sessions, focus groups, and long debates. WeDecide helps organizations engage those most likely to have the best ideas—employees and customers—in a fun and efficient, game-like innovation process. WeDecide clients rent access to a web-based innovation platform that functions something like a stock market for ideas. Through the WeDecide web platform, employees, customers, and other stakeholders are assigned credits that they can "invest" by proposing new ideas or buying shares in previously posted ones. Those who propose or invest in winning ideas receive rewards. The result? Organizations tap into the collective creativity of many people, stakeholders can share their opinions and have a voice in the company's direction, and strong teams form as people become co-owners and champions of ideas.