



SINGULARITY
UNIVERSITY



Genentech

Autodesk

NOKIA

Google™

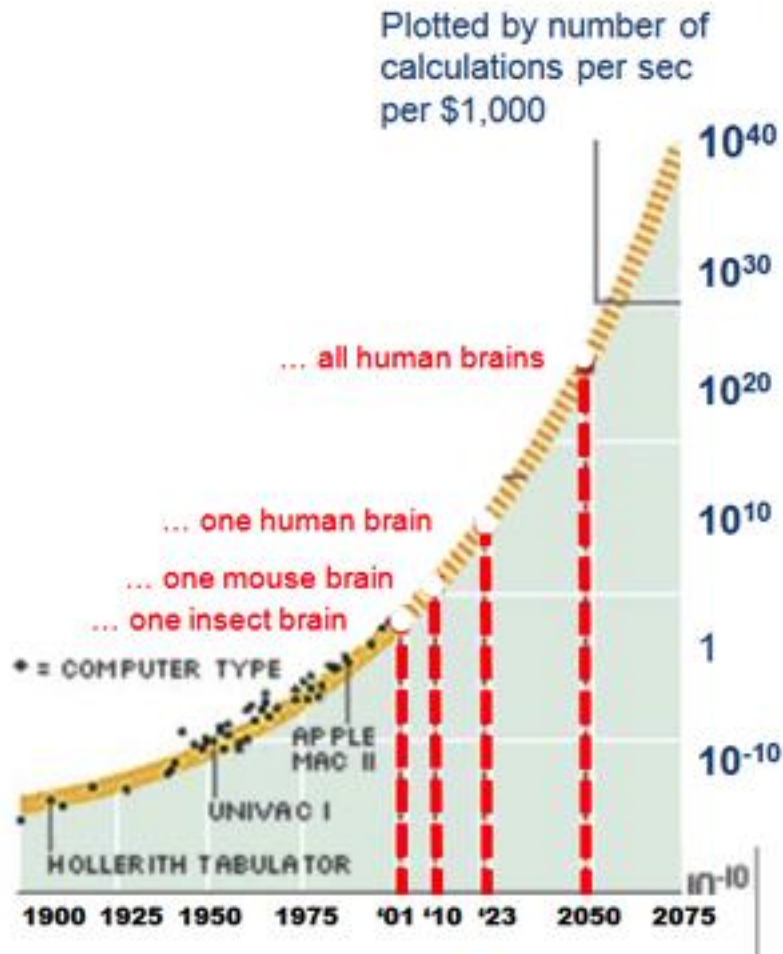
Ewing Marion
KAUFFMAN
Foundation



ePlanet Ventures

CISCO™

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Exponentially

Faster

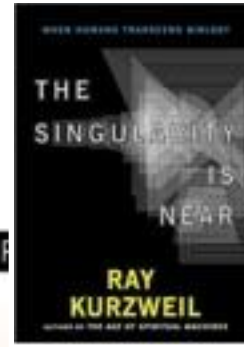
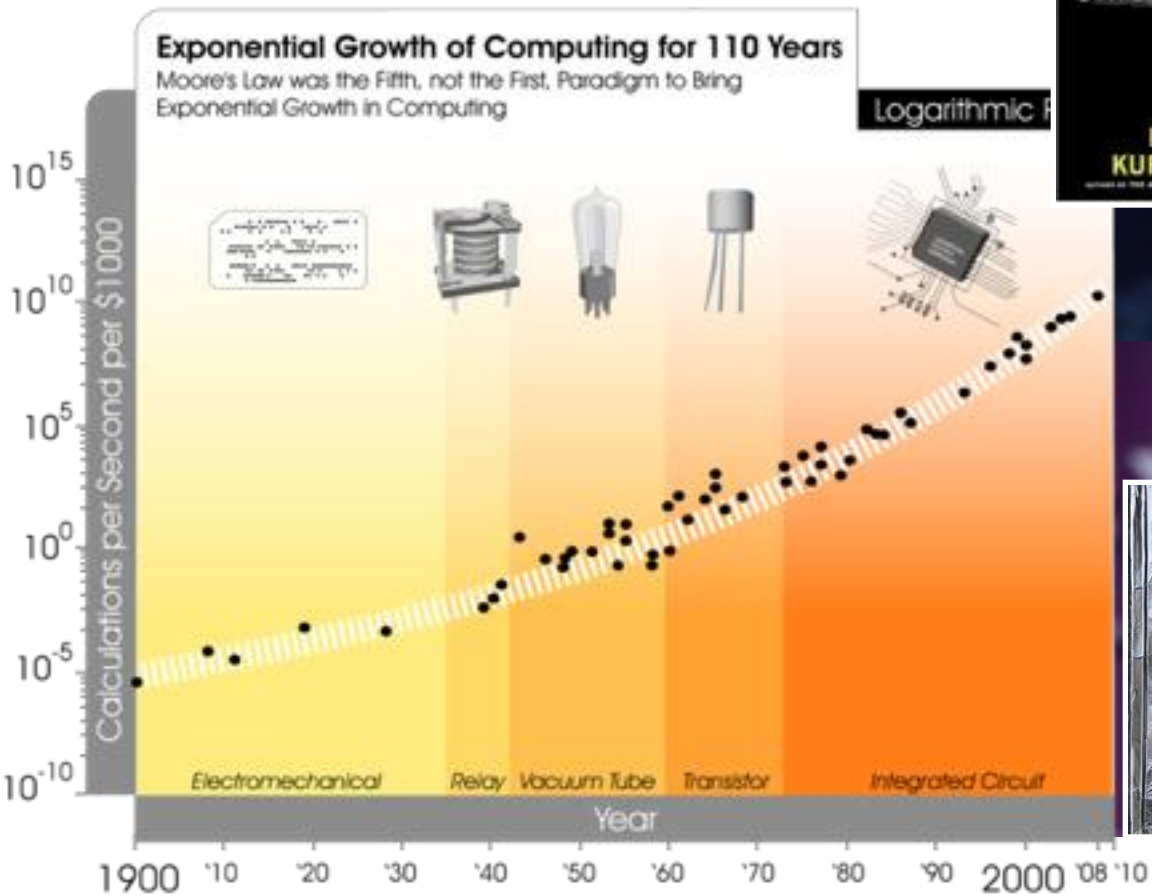
Smaller

Cheaper

Better



Singularity University was founded in Sept 2008 by Drs. Ray Kurzweil & Peter Diamandis





SU Founding Meeting @ NASA Ames - Sept 2008; 50 leaders from the Bay Area

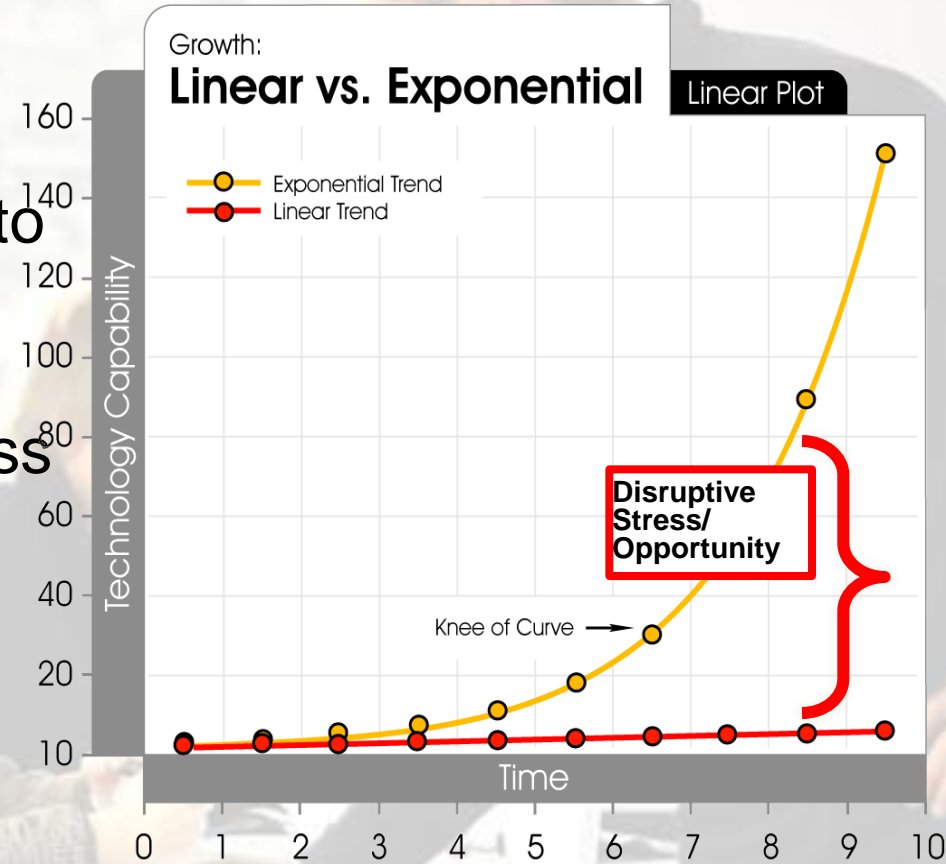


Observation - many of our grand challenges are rooted in accelerating factors

“Are you working on something that can change the world? Yes or no? The answer for 99.99999% of people in the world is ‘no.’ I think we need to be training people on how to change the world. Obviously technologies are the way to do that. That’s what we’ve seen in the past, that’s what driven all the change.”

- Larry Page, Google Co-Founder at SU founding conference

Our mission is to assemble, educate and inspire a new generation of leaders who strive to understand and facilitate the development of exponentially advancing technologies to address humanity's grand challenges



Graduate Studies Program

10 Weeks

- 1x per year, 80 Rising Leaders, Focus on Team Projects

Executive Programs

7 Days

- Multiplex per year, 60-80 Participants
- For established Business, policy leaders, entrepreneurs

FutureMed

5 Days

- 1x per year, 60-80 Participants
- Focus on Future of Medicine and Biotech

Future Security

3-5 Days

- 1x per year, 60-80 Participants
- Focus on Future of Info and Personal Security

Custom Programs

1-3 Days

- Multiplex per year, XXX Participants
- Tailored for specific organization (corporate, government, etc.)

Singularity University Graduate Studies Program NASA Research Park



Technology Tracks

- Artificial Intelligence & Robotics
- Nanotechnology & Digital Fabrication
- Networks & Computing Systems
- Biotechnology & Bioinformatics
- Medicine & Neuroscience

Resource/Mgmt Tracks

- Futures Studies & Forecasting
- Policy, Law & Ethics
- Design
- Finance & Economics
- Entrepreneurship

Application Tracks

- Energy & Environmental Systems
- Space & Physical Sciences



Examples of Advisory Faculty & Speakers



Vint Cerf
Chief Internet
Evangelist, Google



Will Wright
Creator – SimCity,
Spore; Founder,
Maxis (EA)



George Smoot,
PhD
UC Berkeley; 2006
Nobel Prize in
Physics



Dean Kamen
Inventor,
Founder DEKA

Other Notable:

- Sebastian Thrun, Stanford AI, GoogleX; Founder – Udacity
- Saul Griffith, PhD, Eyeglasses, Squid Labs, Instructables.com, Makani Power
- Dan Kammen, PhD – Lead Author, 2007 Nobel Peace Prize-winning IPCC report; Faculty, UC Berkeley
- Bob Metcalfe, PhD, Founder, 3Com; co-inventor of Ethernet
- Chris DiBona, Open Source Program Manager, Google Inc.
- Larry Smarr, PhD, California Inst. for Telecom & IT
- Chris deCharms, PhD, Founder Omneruon
- Tim Ferriss, Author- 4-hour Workweek



Sonia Arrison
Senior Fellow, Pacific
Research Institute



Aubrey de Grey, PhD
Chairman & CSO,
SENS Foundation



Tina Seelig
Exec Dir Stanford
Tech Ventures



Justin Rattner
CTO, Intel Labs



Yvonne Cagel,
M.D.
Astronaut, Colonel-
USAF



Craig Venter
Founder, CEO
Synthetic Genomics



Dan Barry, MD
(Space; AI,
Robotics)
NASA astronaut;
Head of Faculty



Neil Jacobstein
(AI, Robotics)
AI CEO, Visiting
Scholar Stanford



Daniel Kraft, MD
(Medicine)
Stem cell Biology,
Stanford



Ralph Merkle, PhD
(Nanotechnology)
Inst. for Molecular
Manufacturing



Brad Templeton
(Computer &
Networks)
Chairman EFF



Raymond McCauley
(Biotechnology)
CSO-Genomera;
Founder -
BioCurious



Andrew Hessel
(Biotechnology)
Co-Founder Pink
Army Cooperative



Robert Freitas
(Nanotechnology)
Inst for Molecular
Manufacturing



Marc Goodman
(Policy Law &
Ethics)
Futurist for FBI



David S. Rose
(Finance)
CEO Gust, Chair
NY Angels



Gregg Maryniak
(Energy)
Founding Exec.
Dir XPrize Found.



Jonathan Knowles
(Design)
Senior Advisor
Autodesk; Apple



GSP-2010: 80 Students / 35 countries

GSP Admissions Criteria:

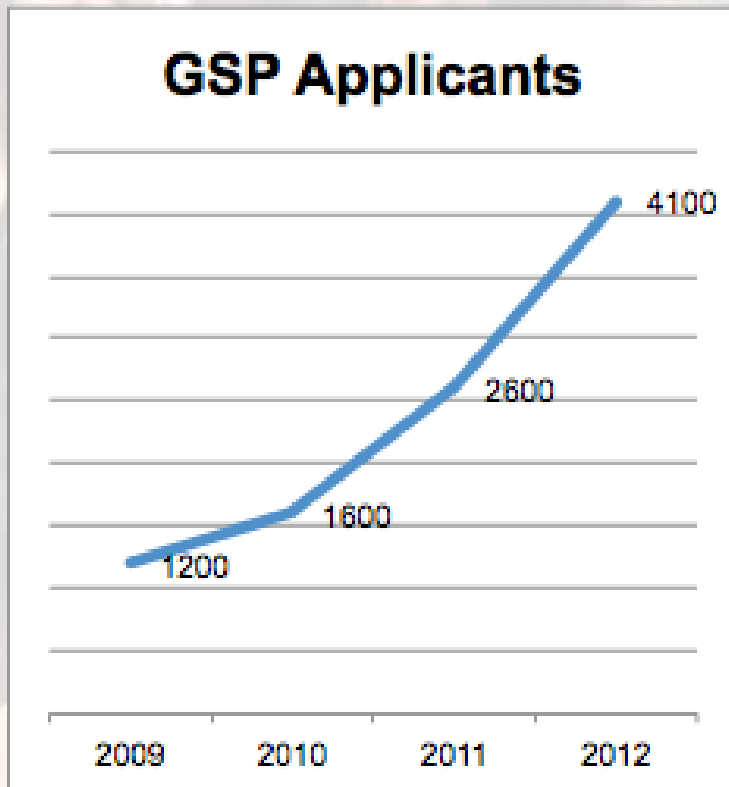
- Extraordinary Brilliance
- Proven entrepreneurs with proven successes
- Proven interest in the world's "grand challenges"
- Graduate/post-Grad level
- Average age: 30

Three primary Selection Criteria for students:

Top in their field academically

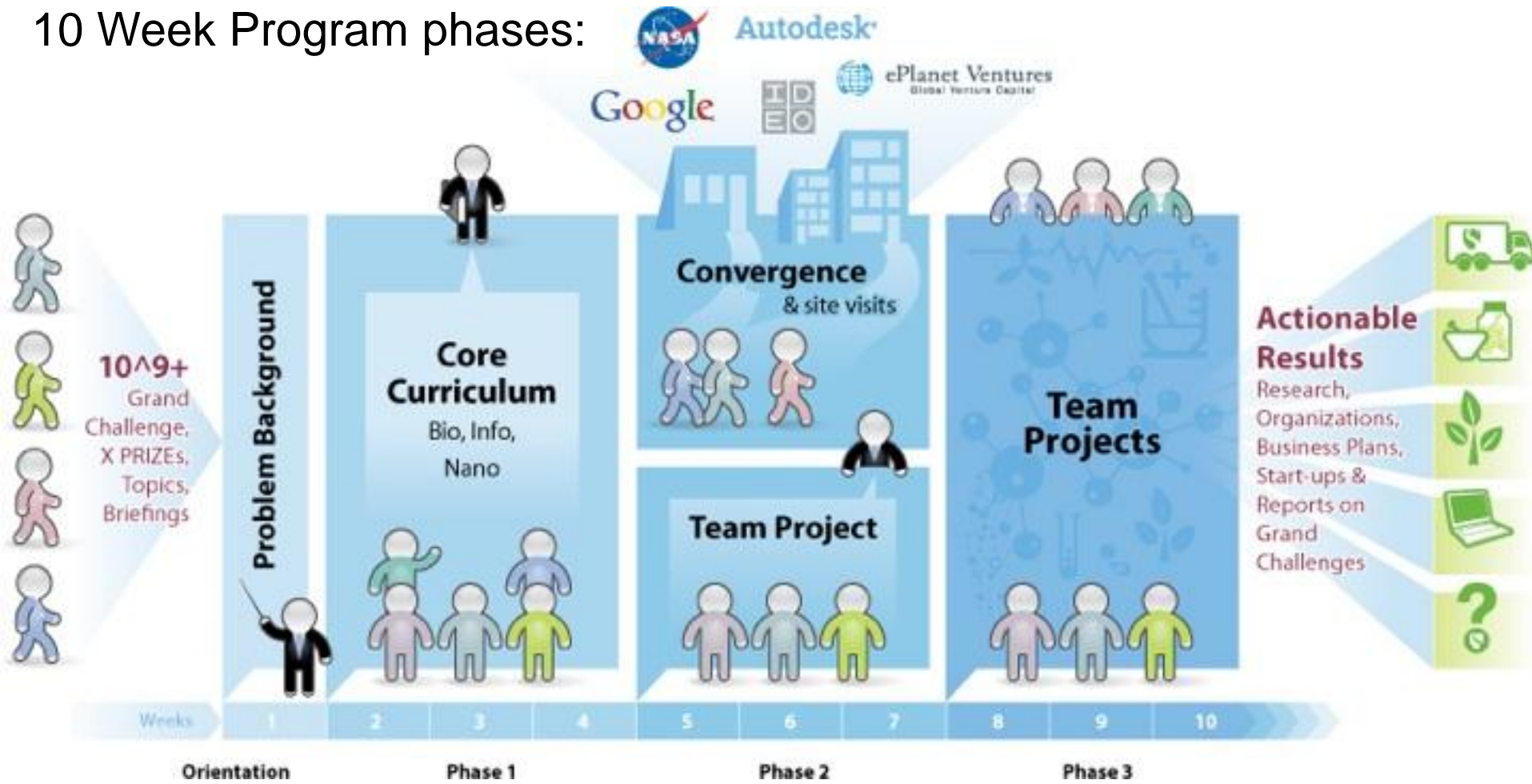
Demonstrated Entrepreneurs/Leaders

Passionate about Grand Challenges

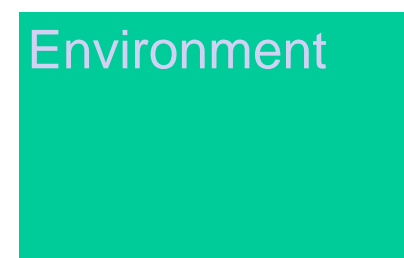


GSP-2010: 80 Students / 35 countries

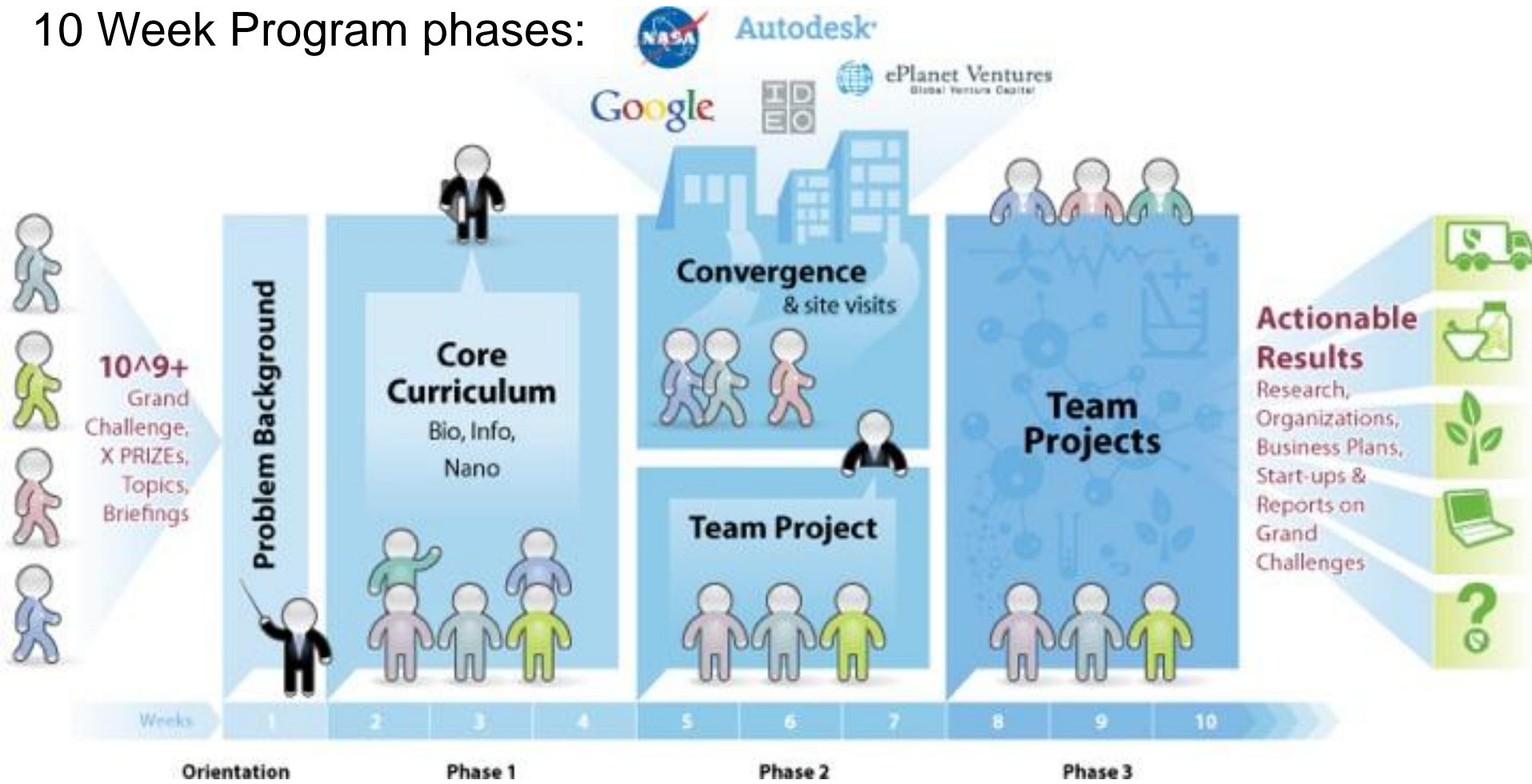
10 Week Program phases:

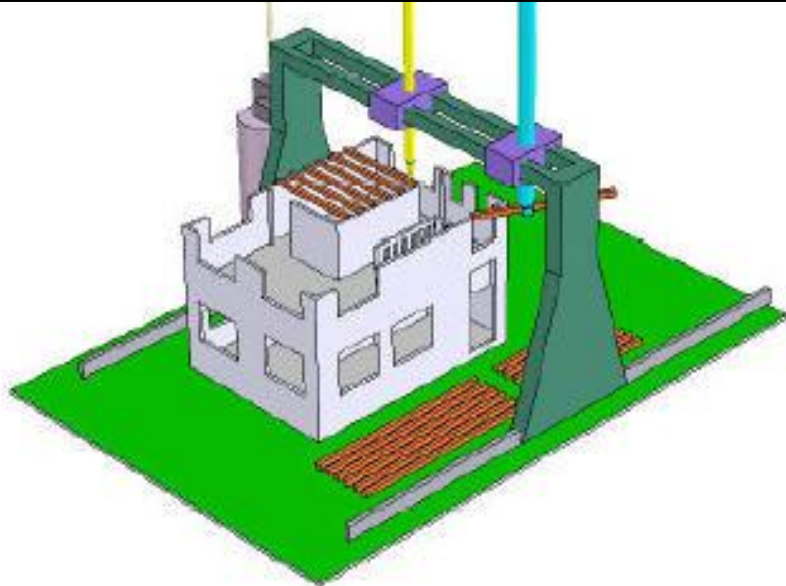


How will you positively affect 10⁹+ 1 billion people in the next decade?



10 Week Program phases:





- Build a 2-bedroom house in 1 ½ days with 30w of power using local materials
- It is projected to cost less than half of conventional masonry.
- The approach is already building 8' walls
- Proof of concept exists, the next step is to commercialize it

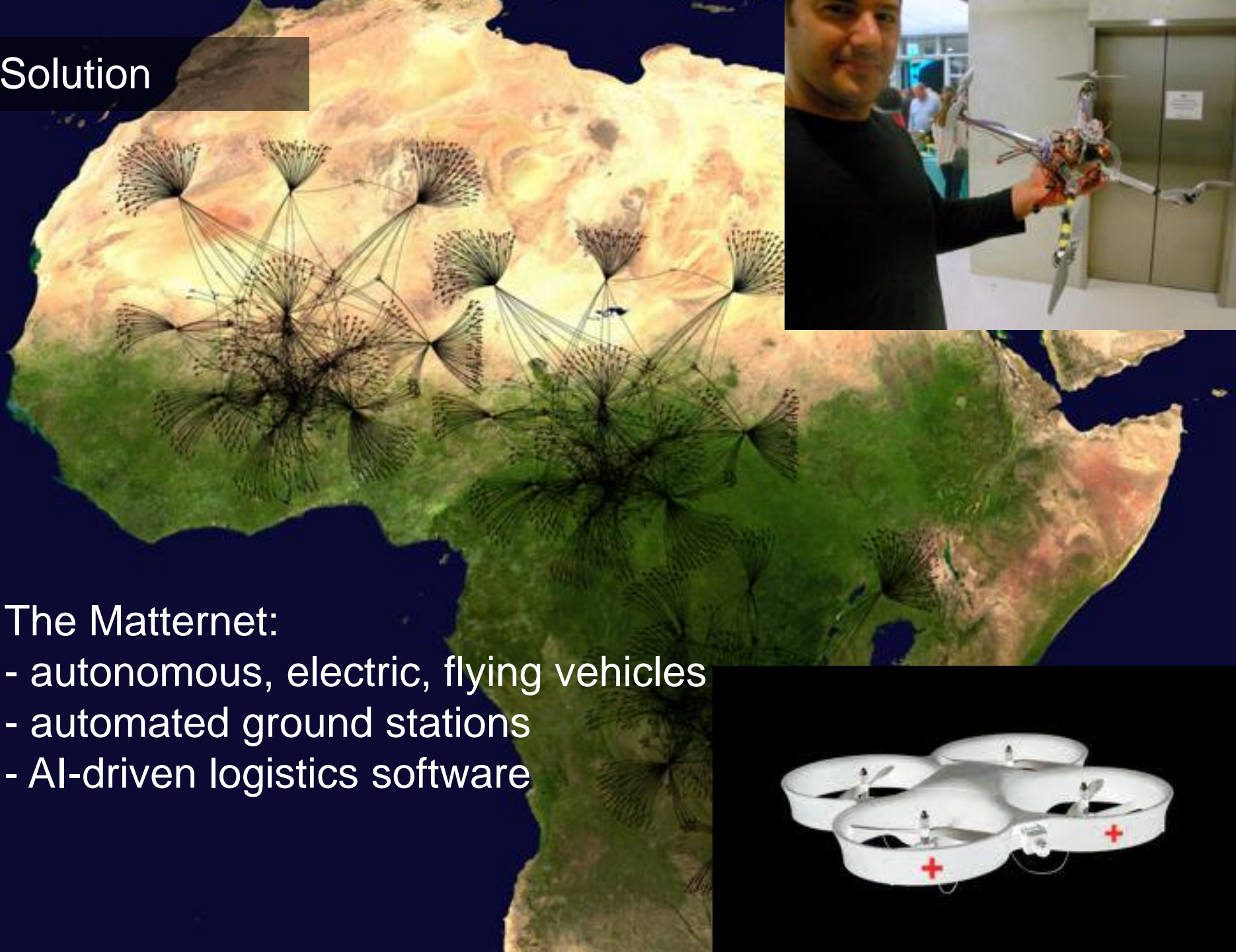
Grand Challenge

1.4 billion in extreme poverty
1 billion with no access to all-season roads





Solution



The Matternet:

- autonomous, electric, flying vehicles
- automated ground stations
- AI-driven logistics software





- Peer-to-peer car sharing marketplace
- Average car costs \$8,200/year and sits idle 92% of the time
- Car sharing projected to be \$6.5B industry by 2016 (Frost & Sullivan)
- Patent-pending in-car technology
- Seamless smartphone-driven user experience
- Comprehensive nationwide insurance



GETAROUND WINS
2011 TECHCRUNCH
DISRUPT CUP



2009 - 4 startups from the Team Projects

2010 – 10 startups

2011 – 11 startups

2010 Team Project Themes:

- Food for Cities – Opportunities in Controlled Environment Agriculture and Vertical Farming
- Home Energy Usage – Off-the-Grid, Stand-alone, Carbon-Neutral, Residential Energy System
- Upcycle – Waste Reduction and Reprocessing Waste Into Useful Products
- Water – Sustainable Water Assets: Holistic Alternatives to Capital-intensive Infrastructures
- Space – To Boldly Stay: Extending Humanity into the Solar System

CiviGuard 

 GETTAROUND

BioMine


AGROPOLIS



“If I were a student, this
is where I’d want to be”
- Larry Page



Singularity University Executive Program NASA Research Park



Executive Program Participants: Entrepreneurs, CEOs, CTOs, investors, inventors, government leaders, and policy experts from around the world



The program concentrates on six exponential growing technologies:

1. Artificial Intelligence & Robotics
2. Nanotechnology
3. Biotechnology & Bioinformatics
4. Medicine & Neuroscience
5. Networks & Computing Systems
6. Energy & Environmental Systems

Discussions
Exercises
Workshops
Site Visits
Industry Implications

The EP provides an understanding of how these accelerating technologies will transform your business and your industry by showing you what is in the lab today and where the technologies will be within the next 3 to 10 years.





Exponential Technological Change

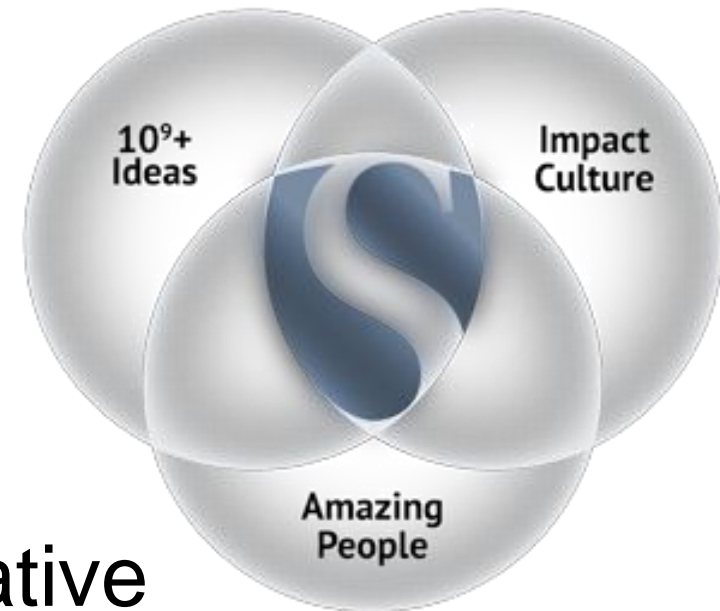
Abundance

Disruptive Convergence

Look forward not back

Think big - 10^9+ Impact

Entrepreneurial and Collaborative



1. Students return home with expanded minds/networks
2. Executives apply this paradigm to their industries



Speaking to Secretary Hillary Clinton & 70 govt heads



Private mtg with President >
Shimon Peres of Israel



EXPO2015 - “Feeding the Planet”

June 20, 2011 - SU & Expo2015 announce multi-year partnership

SU will drive the technological thinking for EXPO2015

Piloted student contest with Brazilian Univ

- “Conceive and implement an idea to impact 1 million people around Sao Paulo”



Extraordinary results:

- Time: two months
- Projects created: 230
- Potential impact: PRICELESS



Fabio Teixeira - Winner

“To win the chance to attend SU and work on projects to impact a billion people, come up with an idea that would impact a million people in your area.. and start implementing it”

- 2011 – 12 students/500 projects
(Brazil, Israel, Russia, Israel, Palestine, Guatemala, Spain, U.S.)
- 2012 - 22 students/1000 projects



“To win the chance to attend SU and work on projects to impact a billion people, come up with an idea that would impact one million people within five years... and start implementing it”.

- Winner – receives full scholarship to attend SU ~ \$30k
- All winners also get \$10k of software from Autodesk
- Looking for additional award funding:
- 2nd Place - \$15k to implement project
- 3rd Place - \$10k to implement project

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2012
Global
Impact
Competition

