

# Kevin Simon

KevinPSimon@gmail.com

C: (408) 355-3632

KevinPsi.com

Somerville, MA 02144

## EDUCATION

### Massachusetts Institute of Technology – Cambridge, MA - GPA: 4.8

S.M. ESD; Tata Fellow

May 2015

Ph.D. Mechanical Engineering; MechE Martin Fellow, Jackson W. Goss Fellow, and Tata Fellow

May 2018

### Franklin W. Olin College of Engineering – Needham, MA - GPA: 3.5

B.S. ME

May 2012

### Khalifa University – Abu Dhabi, UAE – GPA: 3.9

First Exchange Student

Spring 2011

## WORK EXPERIENCE

### Khethworks (Co-founder) – Cambridge, MA + Pune, India

Spring 2015 – Present

- ∂ Startup delivering portable, affordable solar irrigation pumps for marginal farmers in east India
- ∂ Co-created company mission and goals through field visits and pilots with NGOs and rural farmers
- ∂ Co-created core technology through analysis and iterative design

### Otherlab (Intern/Junior Engineer) – San Francisco, CA

Summer 2012 – Fall 2013

- ∂ Wrote grants, made physics models, and built things pertaining to inflatable robotics, peristaltic pumps, concentrated solar power, and compressed gas storage in cars

### The Noribachi Group (Intern) – Albuquerque, New Mexico

Summer 2011

- ∂ Manufactured LED light fixtures
- ∂ Developed solar panel brand focusing on the aesthetic design of solar panels

### KEMA (Intern) – Arnhem, The Netherlands

Summer 2010

- ∂ Developed conceptual design for a pilot plant to capture CO<sub>2</sub> and H<sub>2</sub>O from steam crackers

### NetBase (Intern) – Mountain View, CA

Summer 2008 and 2009

- ∂ Wrote console in Java to manage virtual machines and rapidly deploy applications in AWS EC2

## ACADEMIC WORK

### Massachusetts Institute of Technology – Cambridge, MA

#### *Low-cost Solar Irrigation Pump – Research*

September 2013 – Present

- ∂ Developing low-cost, high efficiency solar powered irrigation pumps for small-plot farmers in developing countries

#### *Evaporation Reduction with Waste Plastic – Research*

November 2013 – June 2015

- ∂ Studied a low-cost method of reducing water evaporation from irrigation ponds

#### *Analysis of Curved Plates for Batteries – Research*

November 2013 – Present

- ∂ Used Rayleigh-Ritz energy methods to develop new design equations from the PDE's for curved plates under pressure

#### *Sample Flexure Transfer Box – Research*

February 2016 – Present

- ∂ Developed low-cost flexural device to manage air-sensitive samples for use in microscopy and micromachining

### Khalifa University of Science, Research and Technology – Abu Dhabi, UAE

#### *Electron Transport in Heterojunctions – Research*

February 2011 – March 2012

- ∂ Studied and modeled spin transport in photo-diodes; presented work at APS 2012 Spring conference in Boston

### Olin College – Needham, MA

#### *Sailbot – Extra-curricular Team Project*

Spring 2012

- ∂ Led mechanical subteam: electronics housing, hull fabrication, control surface design + fabrication, and system integration

#### *Affordable Design And Entrepreneurship - Team Project*

Fall 2011 and Spring 2012

- ∂ Identified needs of, and developed business models for farming co-op in Morocco

#### *Feedstock Recycling - Independent Study*

Fall 2011 and Spring 2012

- ∂ Reviewed and analyzed environmental impacts, technical readiness, and economics of chemical recycling methods

## ACTIVITIES AND OUTREACH

- ∂ **Grand Challenges Scholars Program:** Co-founder and co-author of Grand Challenge Scholars Program at Olin College
- ∂ **Boston Urban Debate League:** Volunteered to judge and mentor inner city high school students in debate
- ∂ **MakerWorkshop:** Helped establish shop community and governance; volunteer staff and training; safety officer

**SKILLS - Machine Shop:** 3-axis CNC mill, lathe, laser cutter, water-jet cutter; **Computer:** SolidWorks, Autodesk Inventor, OnShape, MatLab, Java, EES, Latex, python