

EDUCATION

Massachusetts Institute of Technology**Cambridge, MA**

Master's in Earth and Planetary Science

Received June 2011

- Thesis: Terrestrial Magma Ocean Solidification and Formation of a Candidate D'' Layer
- Department of Earth, Atmospheric, and Planetary Sciences Award for Teaching Excellence, May 2009 & May 2011
- MIT Graduate Presidential Fellowship Recipient, 2007–2008

Wellesley College**Wellesley, MA**

Bachelor of Arts in Astrophysics

Received June 2007

- 7 semesters of coursework and research at MIT and Olin College of Engineering
- Department of Astronomy John C. Duncan Award, June 2007

EXPERIENCE

Arecibo Observatory, National Astronomy and Ionosphere Center**Arecibo, PR**

Data Analyst and Observing Support, Planetary Radar Group

October 2012–present

- Observed dozens of potentially hazardous asteroids annually using S-band radar transmitters and receivers
- Processed data as it is taken to ensure quality as well as system integrity; performed basic troubleshooting
- Maintained a database of all Arecibo planetary radar observations of near-Earth asteroids and data products

MIT AITI: Accelerating Information Technology Initiative**University of Ghana, Legon**

Entrepreneurship & Communication Lead

March–August 2012

- Taught entrepreneurship and business skills to 45 university students from Ghana in a period of seven weeks
- Lead a team of 4 teaching mobile application development curriculum in Python, Django, SQL, and Android
- Created program partnerships with technology incubators, telecommunications companies, and Google Ghana

Angle Labs**San Francisco, CA**

Director of Marketing & Communication

January–September 2012

- Oversaw all aspects of digital product marketing and communication of an Android app at a three-person startup
- Implemented Zendesk helpdesk software to increase quality of customer support and volume of tickets answered

SETI; MIT Earth, Atmospheric, and Planetary Sciences Department; NASA Jet Propulsion Laboratory

Research Associate

2007–2012

- Observed potentially hazardous, near-Earth asteroids and Pluto from a variety of earth- and space-based telescopes
- Analyzed and organized data; maintained a large codebase for thesis project to model early magma ocean on earth
- Collaborated with international teams to present results at conferences and publish in scientific journals

Japan Aerospace Exploration Agency**Tokyo, Japan**

Research Associate, Aerodynamic Research and Development Directorate

July–September 2011

- Designed experiments to characterize supercooled water via temperature sensors and spectral analyzers
- Reduced measurement time for individual experiments by 90%; taught technical English to laboratory co-workers

MIT MEET: Middle East Education Through Technology**Hebrew University, Jerusalem**

Computer Science and Business Instructor

March–August 2010

- Developed a computer science and business curriculum for 28 high school students from Palestine and Israel
- Taught abstraction, modularity, testing, interfaces, graphics, and business skills through laboratories and lectures
- Supervised a group of 7 students developing an instant messenger client and plug-in written in Java in 4 weeks

NASA Jet Propulsion Laboratory Planetary Science Summer School**Pasadena, CA**

Project/Proposal Manager for a team of 18 postdoctoral researchers and graduate students

June–August 2008

- Oversaw all aspects of a Trojan asteroid mission design including choosing science objectives and instruments
- Managed costs (budget of \$650 M) and environmental constraints; designed presentation for NASA review panel
- Proposal satisfied both budget and science requirements; received the highest possible rating from reviewers

INTERESTS

- Sailing: yacht club board of directors member for 3 years; instructor for 4; organized events for 100+ attendees
- Science writing: clients include NASA, PCWorld, TechHive; personal blog at <http://sondy.com>