# Cyrus Vafadari

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#### **EDUCATION**

MIT 2012

B.S. Nuclear Science and Engineering, 4.6/5.0

#### **EXPERIENCE**

Sookbox, LLC 2011 - Present Cambridge, MA

CTO

- · Raised \$600,000 at \$5M pre-money
- · Designed and wrote most of the back-end in PHP, Python, C
- · More at sookbox.com

# Compact Muon Solenoid, LHC, CERN

2010

Research Scientist

Research Scientist

Geneva, Switzerland

- · Observation of Long-Range, Near-Side Angular Correlations in Proton-Proton Collisions at the LHC
- · Predicting probability of piled-up vertices as a function of multiplicity in proton-proton collisions
- · Analyzed over a billion collisions and Monte Carlo simulations in a C++ framework
- · Used Condor for grid computing
- · Discovered evidence of quark-gluon plasma in high-multiplicity p-p collisions, never before observed
- · Project publication: doi:10.1007/JHEP09(2010)091

## Dept. Molecular Biology, Mass. General Hospital

2009-2013

Boston, MA

- · Third author: "Radiation Resistance of Biological Reagents for In Situ Life Detection"
- · SETG, MIT/Harvard group designing and constructing a life-detection device to work on Mars
- · Designed and executed experiments simulating cosmic radiation on a flight to Mars
- · Irradiated over \$40,000 of reagents with over 10 Gy of radiation from 5 different types of radiation
- · Project publication: 10.1089/ast.2012.0869

### Barrett Technology

2009

Mechanical Engineering Intern

Watertown, MA

- · Implemented revision control system for the company's firmware (SVN)
- · Designed and prototyped part for WAM light-weight, dextrous robotic arm

### ACTIVITIES

2005-Present Track and Field

Pole Vault

- · MIT Varsity, PR 4.85m (16 ft)
- · All-New England (DI, DII, and DIII)
- · DIII New England Champion, Spring 2011

### Sigma Alpha Epsilon

2009-2013

Founding member, 1st President

- · Nation-wide colony of the year, 2-time winner of service cup, National zeal award, top new member program, and most improved chapter
- · Also served as recruitment chair (60% increase in membership in my officership),