Cyrus Vafadari

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EXPERIENCE

Shoobx, Inc 2014 - Present
Software Engineer *Boston, MA*

- Module owner for "Equity" module of Shoobx SaaS product
- Designed secure, permissioned, multi-participant workflows that generate and execute legally binding documents
- In charge of all equity-related features: e.g. Captable, Option grants/executions, ASC-718 filings
- Full-stack Responsibility: Python back-end, AngularJS front-end, MongoDB, Postgres

Sookbox, LLC 2011 - 2014
Engineering Cofounder *Cambridge, MA*

- Raised $1.2M to develop a home media streaming and playback solution
- Designed and wrote back-end in Python (rewritten from PHP)
- Designed platform for multi-node architectures, remote message calling, and data marshalling
- Recruited and managed team of 5 engineers, worked with CEO to engage firms in strategic partnerships

Compact Muon Solenoid, LHC, CERN 2010
Observation of Long-Range, Near-Side Angular Correlations in P-P Collisions *Geneva, Switzerland*

- Analyzed over a billion collisions and Monte Carlo simulations in a parallelized grid-based C++ framework
- Advanced statisitcal methods to predict probability of piled-up vertices as a function of multiplicity in proton-proton collisions
- Discovered evidence of quark-gluon plasma in high-multiplicity p-p collisions, never before observed
- Journal publication: doi:10.1007/JHEP09(2010)091s

AWARDS, PATENTS, AND PUBLICATIONS

H@cking Medicine March 2014
Winner, "Best Use of Data" (largest cash prize)

- Designed a system for real-time data aggregation and analysis to quantify risks associated with diabetes

Patents Filed January 2014
Co-Inventor

- Digital Content Connectivity and Control ... Discriminatively: US2014/0330951A1
- Configuring, Networking, and Controlling ... Unique Network-Capable Devices: US2014/0229625
- US2014/0195587 and US2014/0330951A1 (pending)

Additional Publications 2009-2013

- "Radiation Resistance of Biological Reagents for In Situ Life Detection" (Astrobiology: 10.1089/ast.2012.0869)

EDUCATION

MIT *2012*
B.S. Nuclear Science and Engineering

Monte Carlo Methods for Parallel Processing of Diffusion Equations 2012 - 2013
Thesis *Cambridge, MA*

- Modelled neutron flux in reactors as systems of differential equations approximated by linear systems
- Used a message passing interface in C to parallelize a Monte Carlo method to calculate solution vectors