Rachel Fong (rfong)

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http://rfong.github.io

WORK EXPERIENCE

Honeycomb, Software engineer *Nov 2017–Oct 2018*
- Reduced storage needs of distributed query engine by 2.4x
- Worked on features to increase platform usability

OpenAI, Software engineer *Oct 2016–May 2017*
- Built infrastructure, MuJoCo simulations, internal tools, procedural data generation, and physical rigs for robotics AI research

Locu (GoDaddy), Software engineer *May 2014–Apr 2016*
- Built pipelines for automated content extraction from raw websites, products for website autogeneration & templating, internal tools for customer support, automated data quality pipeline

Techstars, Consultant (W14 session) *Jan 2014–Apr 2014*
- Engineering & product consulting for 12 early stage startups
- Assisted in running Techstars accelerator program & Demo Day

Lattis, CTO *Oct 2013–Jan 2014*
- Spreadsheet-like web access to portable RDBMS functionality

Lengio, Software engineer *June 2013–Sept 2013*
- Built NLP backend to autogenerate contextual ESL learning curricula from content of user-uploaded documents.

Bluefin Labs, Software engineer *June 2012–Jan 2013*
- Worked on analytics product for consumer responses to TV ads.

INTERNSHIPS

Facebook (2011) - Facebook Places search engine infrastructure

Monster.com (Winter 2011) - Automated related job suggestions

Endeca (2010) - SQL-like data filters in schemaless data engine

Stanford University (2007) - OpenGL laparoscopic suturing simulator; built knot detection, physics, 3D models, & haptic interface

EDUCATION

Massachusetts Institute of Technology (2008–2012)
B.Sc. in Computer Science

Research – Predictive clinical NLP (OMCS group), gradient 3D printer (Mediated Matter group)

ERRATA

MIT Admissions, Engineering Advisory Board *2014–present*
Educational Council *2014–present*

Always making. Enthusiastic about maintainability, transparency, minimizing process pain points, and reverse engineering things I haven't seen before.

SKILLS

Data engineering/munging, fast end-to-end prototyping, product generalist

Go, Python, full-stack (Django, Rails, devops/deploy/infra, Angular, React, JS, UI/UX, etc). Rusty: C++/C, Java

Photography, basic mechanical design & fabrication, illustration & design, event organization, branding, blogging

SOME PERSONAL PROJECTS

"Meta Markov Mashup" generator

Daft Punk programmable LED visor

$50 tabletop 3D scanner

American Sign Language crowdsourced reverse dictionary & community site

Lexical classifier for satire recognition

Toolpath visualizer + G-code generator desktop app for CNC 2.5D milling

Mechanical design & full fabrication of a human-rideable mecanum drive

RECOGNITIONS

2012 MIT Web Programming Competition (6.470) - 1st place

2009 MIT Battlecode (6.370) - 6th place

USA Computing Olympiad 2007-08 year - Gold division, top 15 nationally

FIRST Robotics, Davis Regional 2007 - Xerox Creativity Award

RESEARCH PUBLICATIONS

Domain Randomization for Transferring Deep Neural Networks from Simulation to the Real World
J. Tobin, R. Fong, A. Ray, J. Schneider, W. Zaremba, and P. Abbeel.
In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2017.
arXiv 1703.06907

Hindsight Experience Replay
M. Andrychowicz, F. Wolski, A. Ray, J. Schneider, R. Fong, P. Welinder, B. McGrew, J. Tobin, P. Abbeel, and W. Zaremba.
In *Neural Information Processing Systems (NIPS)*, 2017.
arXiv 1707.01495

EVENTS

o11ycon Observability Conference, Experience design & content marketing *2018*

Stupid Hackathon SF, Co-organizer *2015-2017*

MIT 6.470, Co-organizer *2013*

SPEAKING

- "UX observability for platform decisions", o11ycon 2018.
- "Observing when it pays off to do nothing: the `rsync` chronicles", o11ycon 2018.