Rachel Fong (rfong)

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http://rfong.github.io

WORK EXPERIENCE

Honeycomb, Software engineer

Dec 2017-present

OpenAI, Software engineer

Oct 2016-May 2017

• 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 and products for website autogeneration & templating
- Built internal tools, auto 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

• First hire. Developed NLP backend to autogenerate contextual ESL learning curricula from user-uploaded documents.

Bluefin Labs, Software engineer

June 2012-Jan 2013

• Built same-day analytics 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 – Clinical NLP - topic extraction and sentiment analysis (OMCS group), gradient 3D printers (Mediated Matter group)

ERRATA

MIT Admissions, Engineering Advisory Board2014-presentEducational Council2014-present

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

SKILLS

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

Python, Go, 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, firespinning

FAVORITE 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) - 1^{st} place

2009 MIT Battlecode (6.370) - $6^{\rm th}$ place

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

FIRST Robotics, Davis Regional 2007 - Xerox Creativity Award

PUBLICATIONS

${\bf Domain\ Randomization\ for\ Transferring\ Deep\ Neural\ Networks\ from\ Simulation\ to\ the\ Real\ World}$

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