Ronnie Ghose

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EDUCATION

CARNEGIE MELLON UNIVERSITY
BS Computer Science,
Human Computer Interaction,
Information Systems
Extensive ECE Coursework
Expected May 2016 | Pittsburgh, PA

THOMAS JEFFERSON HS FOR SCI & TECH (TJHSST)
CS and Math - Advanced Diploma
Grad. June 2013 | Alexandria, VA

SKILLS

PROGRAMMING
Over 5000 lines:
Java • JavaScript • Matlab/Octave
C++• Python • Scala
Over 1000 lines:
Mathematica • C • CSS/HTML5
SML • Processing • Go Arduino
Familiar:
Miso • $\LaTeX$• x86/64 Assembly • Android
MySQL • Stata • R • Shell • Minitab
Misc:
Git/Mercurial/SVN • JSON/XML/BSON
AutoCAD/Solidworks • Blender
EaglePCB • Awk/Sed • Vim (!Emacs)

OPEN SOURCE PROJECTS
Scikit-{Learn, Image}, NetworkX, PySoy, BRLCAD, NumericJS, TreodeDB

LINKS
Github:// RONNCC
LinkedIn:// shomironghose
Quora:// Ronnie-Ghose
StackExchange:// 997301
IRC (Freenode):// RONNCC

TOOLS
Mechanical: Mill, Lathes, Band Saws
Chem/Bio: Flow-through Microassays
Lingual: English, Spanish, Bengali, Hindi

HACKATHONS
PennApps, TartanHacks, Calhacks (travel reimbursed), Scotty

EXPERIENCE

Industry

KPCB FELLOW @ up^there | Search & Infrastructure
Summer 2015 | Palo Alto, CA
- Wrote adaptive, pull-based distributed tracing and logging system based on Twitter Zipkin/Google Dapper with rack-local aggregation, arbitrary datanode pre-computation for log filtering and rich-object reflection for thousands of nodes
- Worked with design and product team to prototype and refine layout and user experience on multiple platforms

ETSY | Data Engineering
Summer 2015 | New York City, NY
- Created end-to-end testing framework to support internal fork upgrades and version changes across 10 databases
- Wrote behavioral bot monitors for Q2 Investor Reports
- Lead collaboration between Risk, Security, and Front-end for new security features to be integrated into all pages

FACEBOOK OPEN ACADEMY | TreodeDB
Spring 2015 | Menlo Park, CA; Pittsburgh, PA
- Collaborated with UW/Penn/UIUC students to write new logger and scheduler-based disk-aware database object writer for k/v store
- Wrote Ruby (REST) client library to interact with exposed HTTP Interface with batch writes and connection pooling

BOOZ ALLEN HAMILTON | User Experience Extern
Winter 2014 | Pittsburgh, PA
- Conducted user research to design maps interface displaying efficient transportation routes. Created low-fidelity prototypes and iterated the design process based on feedback to create hi-fidelity prototypes for usability testing. Accounted for various user groups including elders, users with disabilities, and young professionals using publically available transport data.

ETSY | Databases & Translations Team
Fall 2014/Spring 2015 | Pittsburgh, PA
- Integrating and updating translation workflow into Etsy products to allow serving of native translations

JOHNSON & JOHNSON | Biophysics/Computer Vision
Summer 2014 | Skillman, NJ
- Made 3D model prototype for Olympics 2016 J&J Oral Care Ad
- Novel algos for dental and skin quality (deployed in intl. clinical trials)

LEIDOS/SAIC | Underwater Embedded Systems (Cleared)
Summer 2013 | Arlington, VA
- Created a lightweight, hardware-optimized, concurrent time series storage used in embedded systems (DARPA Transformative Apps Contract)
- Wrote algorithms for robust object detection underwater

MITRE | Cybersecurity
Fall 2013 | McLean, VA
- Used Machine Learning & NLP to create a domain reputation engine (e.g. SiteAdvisor) . Focused on distributed sparse feature learning using publicly available data and near-realtime botnet data
- Achieved results within 2% of academic gold standard

NATIONAL INST. OF STANDARDS AND TECH. | Neutron Reflectometry

Summer 2012 | Gaithersburg, MD

- Monte Carlo Simulation (MCMC) with Maximum Likelihood Estimation for substrate analysis in neutron scattering reflectometry
- Implemented analytic criterion for Markov Chain Convergence for efficient resource allocation

University

TEACHING ASSISTANT

1. Computing for Creative Practice
2. Computer Music
3. Information Systems Milieux
4. Principles of Computing
5. Discrete Math (Concepts)

RESEARCH

INST. FOR SOFTWARE RESEARCH (ISR), CMU

- Automation and scaling of privacy policy parsing and semantic understanding using crowdsourcing (NSF Grant 1330596)

YANG LAB, CMU

- Visualizing and generalizing multiscale vMF models for unsupervised topic categorization (NSF Grant 1216282)

INTERESTS

Eagle Scout, Volunteer Librarian (5 years), Student Council Rep., Botball, Running (XC)

TEAMS

ChemECar (Ethanol Group), {FIRST, FRC} Robotics , Fencing, ACM, APO Service Organization