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https://github.com/probinso

Personal Statement

I am currently a masters student at OHSU, studying computer science with projects in image, signal, and text processing. In my several years of industry experience and prior degree, I developed strong interests in scientific computing, information retrieval, machine learning, programming languages, and reproducible research. I have adapted to, and adopted, a new tool-set in nearly every challenge I have taken on. I am looking for positions to grow and contribute in machine learning or scientific computing.

Persistant Experience :

Python	C, C++	Linux	TDD
R, dplyr	LaTeX	Git	Ticketing Systems

Work Experience

NASA Jet Propulsion Lab – **Graduate Research Intern**   June 2018 – Sept. 2018
  Designed & developed Expert Modeling/Recommender System, by extending the Author-Topic-Model
  Prototyped matching experts against mission critical anomalies, automating expensive tasks
  Implemented stable/principled text normalization, tokenization, and model evaluation
  Open Source contributions to the gensim's natural language processing library
  Technologies : Python, gensim, pyLDAvis, pandas, jupyter

OHSU Fair Neuroimaging Lab – **Research Support Engineer**   Oct. 2017 – June 2018
  Contributed to workflows and analytics tools for studying Microbiome populations
  Supported research on developing brains, including ABCD, and several ADHD/ASD studies
  Developed processing pipeline and audit tools for reported data and FMRI images
  Technologies : Python, Bash, R, neo4j, ponyorm, stan, GitLab

Contractor/Consultant
  RGB Optics / C&W Energy USA   Nov. 2015 – Present
  Developed low cost spectral profile analysis and custom photo image processing
  Authored educational material in light pollution's effect on economy, biology, and technology
  Developed a cloud memoizing data pipeline for caching computationally expensive operations
  Provided live technology tutorials and consulting on optimization and image processing
  ComScore   June 2016 – Sept. 2016
  Worked to support large, custom, memory mapped, data store for demographic analysis
  PDXCodeGuild   June 2016
  Developed and taught introductory python course material for coding boot-camp
  Melinae   March 2016
  Setup infrastructure in AWS to enable secure sustainable remote-first workflow
  Provided hands on training in Python and R to industry professionals
  Technologies : Python, numpy, skimage, R, AWS, PostgreSQL, Perl, C++, Jira, ZenHub

Galois Inc.   – **Research Engineer**   April 2014 – Dec 2015
  Contributed to PPAML, Overseas Voting Foundation, Safeware, Robot Fast Track
  Developed processing pipelines and workflows to enable evaluator work for DARPA programs
  Produced biannual quantitative and qualitative reports on for DARPA and language developers
  Participated in programs sharing new technologies to research and industry professionals
  Technologies : Python, SLURM, Scala, Figaro, Chimpy, Docker, Jira, Basecamp

EMC^2 Isilon Storage   – **Software Development Engineer**   Dec. 2012 – July 2013
  Brought to schedule a lagging anchor release feature in approximately 5 months
  Designed and developed password manager to support Data At Rest Encryption
  Wrote unit tests using libcheck to attain > 80% code coverage
  Technologies : C, C++, Python, SQLite, Subversion, FreeBSD, OpenSSL

Computer Science Dept.   – **Mentors Program Director**   Sept. 2009 – March 2012
  Provided safe environment for training and instruction of students and mentors
  Wrote comprehensive quarterly reports, and tools for automatic report generation
  Technologies : Ada, C++, Scheme, R, mercurial

Neato Projects

Topic modeling and applications, for non-statisticians	*LaTeX*
Whale vocals localization and analysis	*scipy, Python*
Workshop collaborative introduction to GitHub and slides	*markdown, bash, github.api*
Morphological Watershedding Algorithms	*pyspark, numpy, ndimage, Python*
Relevance Vector Machine	*Julia*
Information Retrieval Cluster/Rank Demo Harness	*flask, numpy, nltk, sklearn, Python*
Gene Data Breast Cancer Drug Predictor	*R, caret*
Distributed Fully Homomorphic Encryption System	*Hadoop, Sagemath*
Concurrent Elliptic Curve Cryptography Module	*Sagemath, Erlang*
Multilingual Analysis of Subordinating and Coordinating Conjunctions	*R, Perl*
AdaRailz Concurrent Model Train Control System	*Ada*
Fractal Art Generator	*C#*
Image Manipulation Program	*C#*
Unix Shell	*C*
Liars Dice Game Server	*C*

Education

Oregon Health Science University   CSLU

Computer Science MSc

2016 – present

Courses :

- ⋆ Deep Learning
- ⋆ Artificial Intelligence
- Digital Signal Processing
- Problem Solving with Large Clusters
- Image Processing
- Machine Learning
- Information Retrieval
- Computing Ethics
- Statistical Methods
- Univariate Statistical Analysis
- Analysis of Sequences

Western Washington University   Computer Science

Computer Science BS, Mathematics Minor

Sept. 2007 – June 2012

Electives :

- Homomorphic Encryption Systems
- Cryptography & Elliptic Curves
- Artificial Intelligence
- Natural Language Processing
- Functional Programming
- Computer Graphics
- Number Theory
- Elementary Real Analysis
- Abstract Algebra
- Linear Algebra I/II