

MARIAH ROGERS

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EDUCATION

University of California, Berkeley

B.A. in Computer Science

GPA: 3.39

Berkeley, CA

May 2017

Relevant Coursework: Applied Natural Language Processing (current), Neural Computation (current), Intro to AI, Programming Languages & Compilers, Intro to Database Systems, Engineering Parallel Software, Algorithms, Discrete Math, Data Structures, Intro to Computer Architecture

RELEVANT EXPERIENCE

National Security Agency, Summer Intern

Summers 2015, 2016

- Summer 2016, Science and Technology Intern
 - Was responsible for the development of several core components of mission-critical applications.
 - Focused on the scalability and performance of the components responsible for ensuring the system meet and exceed its performance objectives.
 - Contributed to initial design and implementation of complex matching and optimization of related data using complex queries over an ArangoDB graph database.
- Summer 2015, Computer Science Intern
 - Wrote an algorithm in Python based on grammatical rules to determine locations of dropped pronouns in informal Portuguese text.
 - Developed a model for predicting re-insertion of these dropped pronouns using Support Vector Machines trained on the hand-corrected outputs of the grammatical algorithm.
 - Trained a model on the hand-annotated ground-truth data to complete this task with higher accuracy and lower rate of false positives than the naive grammatical algorithm.
 - System now used by other downstream analytics.

UCB Foundations of Data Science Course, Undergraduate Student Instructor

Spring 2016

- Taught course material and answered students' questions at weekly lab sections for data science course.
- Assisted with course development, assignment creation, exam proctoring and grading.
- Acted as the lab assistant coordinator.

Neurobehavioral Systems, Inc., Student Software Engineer

Aug. 2014 - May 2015

- Completed a multi-threaded TCP/IP messaging service (in Python) with command-line directed server and client interfaces and message passing to a program execution directive for employer's stimulus delivery and experiment control program.
- Scripted processes to automatically generate formatted, hyperlined and indexed web documentation from JSON and XML markup texts for employer's proprietary programming language.

College of Environmental Design, UCB, Student Technology Assistant

May 2014 - Sept. 2014

- Completed regular maintenance of large-format printers and other equipment.
- Performed basic network and system administration.
- Managed college-wide student database for transactions and record-keeping.

PROGRAMMING PROJECTS

- Employed artificial intelligence techniques to develop agent strategies for Pacman game.
- Architected a complete compiler (in C) from academic programming language to MIPS assembly.
- Designed an AI player (in Java) for strategy board game.
- Created "Virtual flash card" math proficiency game for elementary school students.

SKILLS (IN DECREASING ORDER OF FAMILIARITY)

Programming Languages & Frameworks: Python, Java, C/C++, SQL, L^AT_EX, Scala, OpenMP, OpenCL

Programs & Technologies: Emacs, Git, JDB, JUnit, Linux, Mac OS X, Windows

Languages: Portuguese (limited working proficiency)