

Soroush Nasiriany

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EDUCATION

UC Berkeley

BA in Computer Science | 2015-2019

GPA: 3.97

Homestead High School

Cupertino, CA

GPA: 4.0 | Valedictorian

COURSEWORK

| | |
|------------|-------------------------|
| CS 61A | Python Programming |
| CS 47B | Data Structures |
| CS 61C | Computer Architecture |
| CS 70 | Discrete Mathematics |
| CS 162 | Operating Systems |
| CS 170 | Algorithms |
| CS 188 | Artificial Intelligence |
| CS 189 | Machine Learning |
| CS 294-112 | Deep RL |
| MATH 53 | Multivariate Calculus |
| MATH 110 | Linear Algebra |
| EE 126 | Probability Theory |
| EE 127 | Convex Optimization |
| EE 221A | Linear System Theory |

TECHNICAL SKILLS

Languages

Python, Java, C/C++

Web

HTML, CSS, SQL

Frameworks

Tensorflow, ROS, Docker

Tools

Git, Mercurial

AWARDS

USA Computing Olympiad Gold Division

12.20.2017

EXPERIENCE

Undergraduate Researcher, UC Berkeley AI Research Lab | Sept 2016–

- Combining Model Based and Model Free Reinforcement learning in robotics, adv. by Prof. Sergej Levine

Undergraduate Student Instructor, CS 189 | Sp 2017, Fa 2017, Sp 2018

- Teaching Machine Learning topics (Classification, Regression, Neural Networks, Decision Trees, PCA) to 500+ students
- Holding discussion sections, office hours, project parties, and creating exams
- Managing academic interns, guerrilla sessions, creating official course notes

Software Engineering Intern, Facebook | May-Aug 2017

- Maintained and added features to the internal Apache Zookeeper project

Undergraduate Researcher, UC Berkeley Cell Biomechanics Lab | 2015-2016

- Applied automata theory and machine learning techniques to bioengineering domain, adv. by Prof. M. Mofrad
- Developed visual DNA sequence modeling with pattern matching and compression functionality
- Applied machine learning to classify mental state of users of health forum

Organizer, Teen Hackathon | 2014-2015

- Organized large-scale hackathon at Paypal headquarters; sponsors, including Google, Dropbox, Pebble

PROJECTS

DNA Sequence Compressor

- Models series of DNA sequences as a graph
- Applies graph minimization to compress the sequences to find patterns
- Outputs original and compressed sequences in visual graph diagram

PUBLICATIONS

Text Analysis and Automatic Triage of Posts in Mental Health Forum

Association for Computational Linguistics (ACL) journal

- Used random forest classifier to predict the mental state of users in the ReachOut.com mental health forum
- Used standard cross-validation techniques and scikit-learn Python library; achieved accuracy rate of 80 %