

# Soroush Nasiriany

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## EDUCATION

### UC Berkeley

BA in Computer Science | 2015-2019

GPA: 3.96

### 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

09.10.2017

## EXPERIENCE

### Software Engineering Intern, Facebook | May-Aug 2017

- Maintained and added features to the internal Apache Zookeeper project

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

- Combining Deep Reinforcement Learning with Bayesian optimization in robotics, adv. by Prof. Sergey Levine
- Enabling robots to quickly learn tasks with multiple stages, eg. grasping a moving object and opening a door

### Undergraduate Student Instructor, CS 189 Machine Learning | Sp, Fa 2017

- Teaching Machine Learning topics (Classification, Regression, Neural Networks, Decision Trees, PCA) to 500+ students
- Holding discussion sections, office hours, project parties, and creating exams

### 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 %