

# Tasnim Khandakar

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## objective

I am an engineer & a learner interested in artificial intelligence, data engineering & journalism. I am passionate about enhancing my skills in a world driven by technology and information and contributing to a collaborative environment.

## education

### University of California, Berkeley, Class of 2019

B.A. Cognitive Science

Select coursework: Data Structures, Computer Architecture, Discrete Math & Probability Theory, Multivariable Calculus., Adv.. Linear Algebra, Computer Security, AI, Efficient Algorithms, Database Systems, Data Science, Machine Learning, Internet Arch. & Protocols, Data Visualization, Random Probability & Processes

## work

### Docker, Inc, June 2019 - May 2020

*Software Engineer*

- Backend engineer for Docker Trusted Registry, used test automation software to automate over 80% of manual tests with Ginkgo to create monthly shippable builds and patch releases faster.
- Debugged continuous integration errors on Jenkins, and used multi-node Docker clusters to maintain registry and assure cloud agnostic performance.
- Enhanced local testing framework by ensuring Docker clusters can be generated and ran in parallel on MacOS, using scripting languages and Python.

### UC Berkeley: Division of Student Affairs, June 2018 - April 2019

*Web Assistant*

- Perform website maintenance auditing, reporting, and analysis, using Google Analytics and generating reports for the team.
- Assist with website documentation, and site performance reviews, such as accessibility, usability, and UX.

### International Computer Science Institute, March 2018 - May 2018

*Research Assistant*

- Helped with qualitative analysis tasks for experimental and user security such as data coding, themes grouping, and data coding for large data sets.

## projects

### Transport, November 2018

Implemented a socket that implements a subset of TCP (and other core parts of the protocol) that supports ACK, SYN, & FIN control bits. The socket uses a user space implementation written in Python.

### Convolutional Neural Networks & Performance Programming, April 2017

Used convolutional neural nets to identify pictures of cats from hundreds of different inputs. Increased performance by 4x via SIMD instructions, parallel programming, and thread-level parallelism.

### Ataxx, November 2016

Built a game called Ataxx that used various data structures and high levels of data abstraction to create AI that wins in 5 moves using minimax algorithm and game trees. Worked with graphs, linked lists, various trees, heaps, queues, and stacks to create virtual multiplayer game.

## skills

**Languages:** Python, C, Java, Go

**Frameworks:** jQuery, Ruby on Rails, Ginkgo, Postgres