

SEAN SYED

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EDUCATION

University of Southern California, Viterbi School of Engineering, Los Angeles, CA **Aug 2017 - present**

Bachelor of Science, Computer Engineering and Computer Science (Dec. 2020) (GPA: 3.78)

Master of Science, Electrical Engineering, *Specialization: Machine Learning* (Dec. 2021) (GPA: 3.78)

TECHNICAL SKILLS

Programming Languages and Proficiencies: Python, Java (Spring, Hibernate), HTML/CSS/JavaScript (React, LESS), Conductor, Jenkins, Spinnaker, Kubernetes, Postgres, C/C++, Verilog

Hobbies: Surfing, saxophone, guitar, chess

Currently playing *Returnal*; **reading** *Mistborn: The Hero of Ages*; and **watching** *Westworld*

WORK EXPERIENCE

Redfin Corporation, Software Engineer

Jan 2021 - present

Document Intelligence (Oct 2021 – present)

- In **Python**, perform feature extraction and model selection against a corpus of files in order to segment file pages into separate documents, which are subsequently classified
- Achieve 90% segmentation and classification accuracy across over 50 business markets
- Communicate with users and gather feedback to investigate, cost, and implement changes to our different UX flows

Transaction Efficiency Engineering (Jan 2021 – Sept 2021)

- Build agent-facing tools to help optimize Redfin's closing process while leveraging **Java** and **JavaScript** frameworks
- Drive service-level objectives and monitoring of our asynchronous workflows in **Conductor**

Children's Hospital Los Angeles, Research Assistant

May 2020 – Dec 2020

- Take part in image processing efforts with an emphasis on normal and abnormal brain development
- Experimentally research a pipeline for unsupervised segmenting and labeling of MRI imagery pertaining to brain anatomy in fetuses, newborns, and children with various brain disorders

USC ALCHEM, Research Assistant (**Winner, Viterbi Research Showcase Competition**) **May 2020 – Aug 2020**

- Winner of 2020 Viterbi Research Showcase Presentation Competition
- In **C**, implement and benchmark distributed graph mining algorithm framework to operate across ALCHEM's distributed computing cluster
- Model a graph mining algorithm generator off of Automine in order to optimize compilation based on the given problem and graph that will be processed

USC Viterbi School of Engineering, Teaching Assistant

May 2019 – Dec 2020

- For USC's core data structures and algorithms course, design and lead labs with the goal of guiding students through using new tools at their disposal, such as **CMake** and **GTest**
- Write automated grading scripts to evaluate the performance of students' **C++** submissions against a preconfigured rubric

PROJECTS AND OTHER EXPERIENCE

Field Programmable Gate Array Evolutional Network

Aug 2019 – Nov 2021

- Leverage evolutionary algorithms on to program **FPGAs** performing various classification tasks, which were benchmarked using **Verilog**
- Bypass latency associated with maintaining trained models by implementing behavior without the use of neural networks

Center for Artificial Intelligence in Society's Student Branch, Project Manager

Jan 2019 – May 2019

- Supervise project team aimed towards constructing an RL chess engine
- Conduct research into various implementations of chess engines and work to reproduce them on our own