ZAIN MOBHANI

SOFTWARE ENGINEER

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Professional Summary

- Graduate with Dual Degree - B.S. Computer Science and B.A. Math, Econ & Statistics.
- Proficient with source control (Git), command line interfaces (Bash/ZSH); Linux is my forte.
- Strong command of Operating System fundamentals (multi-threading, mutex, race-conditions, etc.)
- Experienced in software development lifecycle and AGILE/SCRUM methodologies.
- Combine deep customer empathy with an engineer's love for solving complex problems; strong belief in technology's potential to transform lives for better.

Skills

Languages: C, C++, Python, JavaScript, HTML, CSS, RISC-V, Intel x86 Assembly, Haskell
Frameworks/Libraries: React, webGL, THREE.js, keras, TensorFlow, pandas, NumPy, NLTK, Docker, Elasticsearch
Other: MATLAB, Stata, LaTeX, Adobe Suite (Premiere, Photoshop, Lightroom, etc.)

Education

University of California, Santa Cruz - B.S. Computer Science - Jun 2022

Object Oriented Programming, Functional Programming, Data Structures & Algorithms, Applied Machine Learning, Operating Systems, Computer Graphics, Computer Architecture, Foundations of Programming, Computational Methods & Applications, Analysis of Algorithms, Compilers

University of California, Santa Cruz - B.A. Mathematics, Economics, & Statistics - Jun 2022

Differential Equations, Number Theory, Real Analysis, International Finance, Classical & Bayesian Inference, Probability Theory Industrial Organization, Econometrics, Advanced Quantitative Methods, Security Markets & Financial Institutions, Linear Algebra

De Anza College, Cupertino – Associates Degree in Computer Science, Magna Cum Laude - Jun 2020

Aga Khan Academy, Hyderabad – International Baccalaureate Diploma Programme (IB DP)

Experience

Software Engineer Intern – **Tyroo, Inc.** - Ad-tech partner for Snapchat, Netflix, Grab, etc.   05/2017 to 11/2017

- Cleaned and parsed millions of records to feed into Tyroo's custom Machine Learning algorithm
- Provided personalized ads and marketing to users for all users (web, mobile, etc.)
- Created web-scraper for vid.ai to convert articles & webpages into ads optimized for mobile users
- Used Natural Language Processing (NLTK) to condense articles into a set of key highlights for ads

DevOps (part-time) – **ThinkWalnut** - #5 Indian fintech, part of listed Shemaroo group   11/2017 to 06/2022

- Ensured smooth and uninterrupted operation of payment processing using custom consolidated API
- Tested and reported potential issues with payment processing to senior development & DevOps

Design Intern – **frog Design, Inc.** - #1 design consultancy, Apple's design firm pre Jony Ive   06/2015 to 08/2015

- Helped reimagine and modernize 10,000+ payphones in NYC – LQD Palo
- Proposed, selected, and validated locations of LQD Palo deployments for maximum impact

Projects

- **Word Cast** - Python applet to alter tone of emails and messages using natural language processing (WIP)
- **Web-FPS** - Recreated Counter-Strike using THREE.js with custom shaders and assets
- **Polygon maker** - Sandbox with ability to create & manipulate n-sided polygons with custom shaders and lighting
- **Patient Survivability Index** - Predicted likelihood of heart failure based on stats using linear regression model
- **Local Average Treatment Effect** (LATE) - Determined causal effect of legal drinking age using regression discontinuities in arrest records