# Abtin Bateni

abtin@bateni.org | linkedin.com/in/abtin-bateni | github.com/mr-bat

# Software Engineer

Experienced developer and competitive programmer, naturally curious and fast learner, ranked 56th worldwide at ACM-ICPC and placed top 7 nationally for 3 consecutive years, seeking a software engineering position to utilize my knowledge of distributed systems and algorithms.

## EDUCATION

## University of California, Santa Barbara

09/2019 - 03/2022

M.Sc. in Computer Science, Distributed Systems Specialization, GPA: 3.67

Santa Barbara, CA

• Relevant Coursework: Adv. Distributed Systems (A), Scalable Internet Services (A+), Cloud Computing (A)

## University of Tehran

09/2015 - 07/2019

B.Sc. in Software Engineering, GPA: 3.57

Tehran, Iran

- Honors Thesis: 4x Faster Data Structure Design for Handling Stock Exchange Transaction Matching (in Java)
- TAed for 8 courses, including Advance Programming, Data Structures, Design Algorithms, Internet Engineering and Engineering Probability and Statistics, designed 10 assignments in C++/Python/React.js, helped 400+ students

# Work Experience

# Software Developer Intern

06/2021 - 09/2021

Google, Spanner team - Distributed SQL Database Management and Storage — (website, linkedin) Santa Barbara, CA

- Developed a C++ library to investigate complex scenarios where query changes resulted in query-plan modification
- Implemented a key feature to visualize regions where differing/changing queries result in a similar query-plan
- Identified 9 unanticipated query-plan changes and one query scenario where an unexpected plan was chosen
- Technologies used: Google Spanner, Protocol Buffers, C++, Linux

#### Software Developer

06/2018 - 04/2019

HerminaTech - Property & Hospitality Management Software — (website, linkedin)

Tehran, Iran

- Implemented 30+ new front-end features, ranging from purchase handling, and rating services to financials
- Refactored 20k+ lines of code, upgraded manual system APIs and integrated the new design within the system
- Led 3 sprints as the Scrum Master of 5-10 multi-disciplinary engineers, meeting 90% of the pre-defined milestones
- Technologies used: React.js, Spring, Java, Gitlab CI, Linux

# SELECTED PROJECTS

All on Cloud 9 (github) | Blockchain, NATS, Kubernetes, Docker, Go, AWS, Ubuntu, Git

Spring 2020

- Developed a blockchain ledger to connect distrusting parties without exposing critical user/transaction information
- Implemented four consensus protocols to efficiently use system resources, solved 3 different encompassing failure modes

Distributed Sandbox (github) | Go, Travis CI, Express.js, Node.js, Ubuntu, Git

Winter 2020

- Implemented and tested Paxos, distributed dictionary, and Lamport lock protocol and simulated a blockchain
- Setup a separate server for automatic bookkeeping of node addresses and CI/CD to smooth the development

**NAOFS** (github) | C, libfuse, Travis CI, Coveralls, Ubuntu, Git

Winter 2020

• Designed, implemented, and tested an entire file system to work on the linux kernel using FUSE

# VOLUNTEER EXPERIENCE

# Event Manager at the 4th Panjere Conference on Engineering Specializations

02/2018 - 05/2018

University of Tehran, ACM Student Chapter

Tehran, Iran

- Mentored sophomores and provided career development advice in collaboration with industry C-Suite executives
- Led 4 teams of 3-6 volunteers to coordinate speakers, plan inter-talk activities and create an engaging environment

## Awards

## ACM-ICPC World Finals, Ranked 56th Internationally

05/2017

Competed in the ICPC, the most established multi-stage programming contest for university students worldwide. Utilized effective teamwork skills to solve programming problems in data structures and algorithms.

## TECHNICAL SKILLS

- General: Object-oriented design, CI/CD, Testing
- Languages: C/C++, JavaScript, Java, Python, Go
- Frameworks: React.js, Node.js, Express.js
- Tools: Git, Docker, AWS, TravisCI, GitLab CI, Linux