Ehsan Hajyasini

Curriculum Vitae

Education

2022-Present	**PhD in Computer Science**, Systems and Networks, Storage Systems	**University of California San Diego**.
2013–2018	**BSc in Software Engineering**, GPA: 17.16/20 - **3.62/4.0**	**University of Tehran, Iran**.

Areas of Interest

Distributed Systems

High Performance & Low Latency Systems

Performance Engineering

Software Architecture

Work Experience

2017-2022 Software Architect, Cofounder, Head of R&D,   **Radin Bourse**.

Lead the Development of the New Trading Platform for Iran's National Stock Exchange
- Developed a High Performance, Ultra Low Latency ($< 1\,\mu s$) Matching Engine
- Researched and worked on System Availability (Raft)
- Developed Benchmarks and Microbenchmarks for the Platform
- Focused on Improving Software Quality
- Trained Interns and Fresh Hires
- Helped Develop the Competency Matrix for Growth and Promotions

2020 Performance Engineer,   **Core Banking Solution (Undisclosed)**.

Performance Analysis and Improvement of the Core Banking Software

2018 (winter) Software Engineer,   **Digital Product School, Germany**.

Helped Develop the Idea & Built a Bike-Sharing Prototype App

2016 Software Intern,   **Cafebazaar**.

Set up a Cache CDN
- Achieved Cache Hit Rate: 99%, Storage Requirement Reduction: 94%

2015 Software Engineer,   **ACM Student Chapter, University of Tehran**.

Set up a live streaming solution with nginx http://live.ut.ac.ir

Technical skills

Highly Skilled	Java, C++, C, Python, Linux Administration
Software	Kafka, Ansible, Spring Boot, PostgreSQL, Nginx, Java Microbenchmark Harness, Android
Others	DDD, Lock-Free Data Structures, Event Sourcing, Micro Services, Infrastructure as Code

Notable Personal Projects

2016-2017 **Online Election System for University of Tehran**, http://vote.ut.ac.ir.

2011 **RoboCup 3D Soccer Simulation**, *TripleA Simulation Team*.
Awarded first place on Khwarizmi technical challenges.

2014 **R.A.N.A.**, An Augmented Reality Solution on Mobile Devices.

2010 **Robocup Mixed Reality**, *TripleA Simulation Team*, RoboCup IranOpen.

Selected Academic Projects

2018 **Improving Accuracy of Deep-Learning-Based Graph Node Classification with Self-Attention**, *Bachelor's Thesis*.

2017 **OO Design of University/Student Management System**, Final Course Project in Object Oriented Design Course, Domain Driven Design.

2015 **Kernel Scheduler**, Final Course Project of Operating Systems.
A user round-robin, task round-robin scheduling policy for the Linux kernel.

2015 **MOL Compiler**, Final Course Project of Design and implementation of Compilers.
A compiler for the MOL language, supporting inheritance, and function overriding.

2016 **Parallel Programming**, Stereo Vision Depth Detection (SIMD, OpenMP, CUDA).

2016 **Internet Engineering**, Course Project, Online Stock Market.
Java EE, Angular

2016 **Formal Methods in Software Engineering**, Simple projects with Alloy, Rebeca, SPIN, and SMV.

2014 **Path Finder**, Final Course Project of Data Structures & Algorithms.
A fast and efficient geographical map explorer (quadtrees, pathfinding algorithms)

Teaching Experience

2016-2018 **Chief Teaching Assistant**, Advanced Programming.

2017 **Teaching Assistant**, Internet Engineering.

2017 **Teaching Assistant**, Formal Methods in Software Engineering.

2016 **Teaching Assistant**, Design and Implementation of Compilers.

Honors and Awards

2017 **Direct Admission to Master of Software Engineering Program As Exceptional Talent Student**, *University of Tehran*, Turned Down.

2016 **ACM Student Chapter Excellence Award**, *A member of ACM team*.

2014 **Faculty of Engineering(FOE) Prize**, ranked 3rd in computer architecture.

2013 **National Universities Entrance Examination**, *top 0.1% of 300,000 contestants*.

2011 **National Khwarizmi Student Award**, *Robotics simulation*.