

# Ehsan Hajyasini

## Curriculum Vitae

### Education

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

### 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 3<sup>rd</sup> in computer architecture.
- 2013 **National Universities Entrance Examination**, *top 0.1% of 300,000 contestants*.
- 2011 **National Khwarizmi Student Award**, *Robotics simulation*.