

Mohammadamin Karbasforushan

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| EDUCATION | Sharif University of Technology , Tehran, Iran | Sep 2016 – Present |
| | <ul style="list-style-type: none">• Pursuing BS in Computer Science; To be conferred June 2021. Current GPA – 3.3 / 4.0• Coursework includes Computer Networks, Data and Network Security, Distributed Systems and Blockchains, Operating Systems, BioInformatics, Image Processing.• Organized seminars in Hamband, the scientific chapter of the Mathematics and Computer Science department• Member of the Sharif Green Society, advocating for environmental protection | |
| | National Organization for Development of Exceptional Talents (NODET) , Tehran, Iran | Sep 2012 – Jun 2016 |
| | Allameh Helli 5 High School | |
| | <ul style="list-style-type: none">• Ranked in the top 0.4% of participants in 2016 nationwide university entrance exam in Mathematics & Physics• Ranked in the top 0.2% of participants in 2016 nationwide university entrance exam in Foreign Language Studies• Diploma In Mathematics And Physics; GPA – 4.0 / 4.0 | |
| EXPERIENCE | Internet Measurements Research Intern , Max Planck Institute for Informatics, Saarbrücken, Germany | Aug 2020 – Present |
| | Supervised by Dr. Oliver Gasser, in Prof. Anja Feldmann's research group | |
| | <ul style="list-style-type: none">• Investigated the impact of changes in TLS certificate lifetime requirements enforced by user-agents.• Designed a pipeline to collect and stay up to date with Certificate Transparency Logs' data• Analyzed data from all available Certificate Transparency Logs | |
| | Data Infrastructure Engineer , Sotoon (Cafe Bazaar Cloud), Tehran, Iran | Jul 2018 – Present |
| | <ul style="list-style-type: none">• Provided the platform to transfer, store, and analyze big data at petabyte scale for multiple user-facing apps with 40M+ active users; For example an Android app store.• Set up and/or maintained Apache {Druid, Kafka, Hadoop, Spark, Zeppelin, ZooKeeper} and M3DB clusters/services• Designed currently running probes and high-accuracy billing systems for the aforementioned systems• Developed Kubernetes operators to manage Apache {Kafka, Hadoop, ZooKeeper} clusters in a Platform as a Service environment• Coordinated our team's work process | |
| | Data Engineering Intern , Sahab Pardaz, Tehran, Iran | Jul 2017 – Sep 2017 |
| | <ul style="list-style-type: none">• Developed a web search engine• Set up, maintained, and wrote a document index/fetch wrapper for Elasticsearch | |
| SELECTED COURSE PROJECTS | Buffer Overflow, Format String, XSS, SQL Injection, and ARP Poisoning Attack Implementation (Data and Network Security) | Fall 2019 |
| | DHCP, UDP Hole Punching, and BGP Implementation (Data Transfer and Computer Networks) | Spring 2019 |
| | Gene Expression, Gene Ontology, and Pathway Analysis (Introductory BioInformatics) | Spring 2019 |
| | Blockchain/Cryptocurrency Analysis Platform (Data Engineering) | Spring 2019 |
| | Crowdfunding Ethereum Smart Contract (Foundations of Blockchain Technology and Cryptocurrencies) | Fall 2018 |
| | Checkers AI with Minimax and Alpha-Beta Pruning (Analysis of Algorithms) | Spring 2018 |
| | CPU Design With Verilog and Quartus (Principles of Computer Systems) | Fall 2017 |
| | Tic-Tac-Toe with AI adversary in MIPS assembly (Principles of Computer Systems) | Fall 2017 |
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| SELECTED COURSES | Data Transfer and Computer Networks | 20.0 / 20.0 |
| | Data Engineering | 20.0 / 20.0 |
| | Advanced Programming | 19.0 / 20.0 |
| | Principles of Computer Systems | 18.7 / 20.0 |
| | Fundamentals of Computers and Programming | 18.5 / 20.0 |
| | Data and Network Security | 18.0 / 20.0 |
| | Database Systems | 17.8 / 20.0 |
| | Introductory BioInformatics | 17.6 / 20.0 |
| | Principles of Image Processing | 17.2 / 20.0 |
| | Foundations of Blockchain Technology and Cryptocurrencies (Graduate Course) | 16.6 / 20.0 |
| ADDITIONAL INFORMATION | SKILLS | |
| | • Proficient in Docker, Kubernetes, Apache {Druid, Hadoop, Kafka, Zeppelin, ZooKeeper}, HashiCorp Nomad, GNU/Linux, Git, GoLang, Python, \LaTeX | |
| | • Experienced with Apache Spark, Java, Scala, Hashicorp Vagrant, Prometheus, M3DB | |
| | TEST SCORES | |
| | • TOEFL iBT score: 115 (Reading 30, Listening 30, Speaking 28, Writing 27) | |
| | • GRE General Test score: Quant 169, Verbal 155, Writing 4.0 | |
| | LANGUAGES | |
| | • Fluent in English; Native speaker of Farsi | |
| | INTERESTS | |
| | • Mountain Biking, Dancing, Cooking, Rock Music, Electronic Gadgets, Cloud Native Software, Computer Gaming | |