

# SHERVIN KHASTOO

## Software Engineer

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## EXPERIENCE

### Senior Software Engineer

#### Google

📅 Apr 2022 – Present

- Lead a team of 8 as the technical lead to design and implement a new multi-tenant mode of operation for GKE enabling up to 20x faster workload startup time and cost savings up to 95%.
- Made GKE work on Trusted Partner Cloud (TPC) for the first time enabling it to operate under strict sovereignty requirements in Europe opening up a \$10 billion total addressable market.
- Created a managed GKE API supporting workload distribution across multiple Kubernetes clusters for Google's internal (1P) services allowing them to easily onboard to GKE.
- Attended oncall rotations to handle customer and technical issues for Google Kubernetes Engine (GKE).

### Senior Software Engineer II/Lead

#### HomeX

📅 Sep 2020 – Apr 2022

- Led a team of 4 on implementing a modern B2B integration with the ServiceTitan FSM (the main revenue source of the company).
- Built an internal status dashboard service to monitor the health of microservices in real-time with support for alerting.
- Led a team of 5 on a modernization effort for backend microservices (switchover of Typescript frameworks, integrating new deployment pipelines and modern logging/monitoring tools).

### Senior Software Engineer

#### Cafebazaar

📅 Jun 2015 – Aug 2018

- Engineered a highly-scalable C2C chat service for Divar product using Elixir and Cassandra handling 500,000 daily messages.
- Built the frontend (PWA) of a C2C chat service using React.js.
- Implemented new features (ad types, payment methods, tax calculations) in Django for Adad mobile advertising network.

## PUBLICATIONS

### 👤 Conference Proceedings

- Khastoo, S., Brecht, T., & Abedi, A. (2020). NeuRA: Using Neural Networks to Improve WiFi Rate Adaptation. In M. Aguilar-Igartua, P. Bellavista, A. A. F. Loureiro, & C. Giannelli (Eds.), *MSWiM '20: 23rd International ACM Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, Alicante, Spain, November 16-20, 2020 (pp. 161–170). doi:10.1145/3416010.3423217

## AWARDS

- 🏆 **Silver Medal in 23rd INOI**  
National Olympiad in Informatics (2013)

## EDUCATION

### M.Sc. in Computer Science

#### University of Waterloo

Thesis: Using Neural Networks to Improve WiFi Rate Adaptation.  
Area: Systems and Networks.

### B.Sc. in Computer Engineering

#### Sharif University of Technology

Area: Software Engineering.

## SKILLS

Go C/C++ Python Javascript  
Elixir Java Bash React.js

SQL PostgreSQL Kafka Spanner  
NoSQL MongoDB Cassandra  
Redis/Memcached Linux Protobuf

Cloud (AWS/GCP) CI/CD Terraform  
Prometheus Data Structures/Algorithms  
Machine Learning (Keras/Tensorflow)  
Neural Networks Observability

Networking Docker Kubernetes

Self-Learning Debugging Mentoring

## PROJECTS

### 🤖 Cryptocurrency Trader AI

Algorithmic trader based on a neural net.

### 🌐 WiFi Traffic Classifier

Classify traffic and mobility using LSTM.

### 🏠 Home Router (Raspberry Pi)

Split-tunnel VPN router with touch screen.

### 📧 SMS Emler (Arduino)

Forward cellular SMS messages as an email.