

Experience

- **iyzico - easy checkout** Istanbul, Turkey
Senior Software Engineer Jun. 2017 - Present
 - **Backend**: Created highly available, scalable and high throughput payment applications with **microservices** using Spring-Boot, Spring Cloud and Java technologies at the core. Practiced TDD and SCRUM as part of the agile culture.
- **Lojika Field Labs** Istanbul, Turkey
Senior Software Engineer (Engineer #1) Nov. 2013 - Jun. 2017
 - **Backend**: Designed parts of core backend system including core database models, algorithms and core state machine. Designed and documented **REST API** conforming to best practices gathered through investigating a number of APIs.
 - **Machine Learning**: Cassandra is an online trip prediction engine that gathers location data from clients and generates trip predictions based on current location. Designed the entire system using PostGIS and Python scripts. Modified DJ-Clustering algorithm for **location clustering**. Designed time clustering algorithms for trip time prediction. Implemented **Markov Chain** for prediction. Achieved **95%** accuracy on daily most probable trips.
 - **iOS**: A social ride-sharing app. 'TAG' focuses on use for daily commutes and being an instant casual transportation alternative. Worked as the sole iOS engineer in the first year and led the iOS team since then. Designed **networking** and **persistence** layers, implemented **MVVM** architecture, designed build configurations for release cycles, designed **continuous integration** build flows. Involved in weekly user tests.
 - **Agile**: Helped adapting to agile development principles and culture by taking on the role of **Agile Coach** and **Engineering Manager** while the company lacked a CTO. Wrote user stories. Experimented with multiple story detail templates to minimize number of bugs caused by communication failure. Introduced git and git-flow.
- **Matriks** Istanbul, Turkey
Software Engineer Aug. 2012 - Nov. 2013
 - **iOS**: Worked on **real-time financial data** and news monitoring iOS applications for financial markets. Trading for biggest brokerage houses of Turkey is enabled on each platform; e.g. 'Matriks Mobil Finans' and 'Is Yatirim Trademaster'. Also worked on custom iOS applications for biggest carriers of Turkey.
- **Nauva** Ankara, Turkey
Co-founder, Manager Apr. 2010 - Aug. 2012
 - **Hardware**: Dream Designer is a novel CAD tool developed that utilizes data gloves and inertial measurement units to create 3D prototypes with natural hand movements. Designed and prototyped a data glove for the application which required **PCB design, sensors and micro-controller** programming.
 - **iOS**: Shoppie is a social-shopping application that presents detailed information on closest shops and special offers. Creates an ecosystem around fashioners. Designed and implemented iOS app. Created a number of other iOS projects.

Personal Projects

- **'Resvapp'**: on App Store and Play Store. Chat with hotel reception. Used Spring-Boot, AWS ECS, Lambda, React-Native
- **'Yildiz Saati'**: on App Store and Play Store. Calculates planet times at your location to display their effects on mood.

Technical Skills

- Java, Python, Kotlin, JavaScript, Objective-C, Swift, MATLAB, PL/pgSQL
- Spring, Spring-Boot, iOS, Android, Node.js, ReactNative, MongoDB, PostgreSQL/PostGIS, Machine Learning, Deep Learning

Education

- **Bilkent University** Ankara, Turkey
M.Sc. in Electrical and Electronics Engineering (Robotics, Sensing, DSP) Sep. 2010 – Jan. 2013
- **Middle East Technical University** Ankara, Turkey
B.Sc. in Electrical and Electronics Engineering (Telecommunications, Sensing) Sep. 2005 – Jan. 2010

Publications

- **Yumer, R. Akar, N., & Karasan, E. (2014).** Class-based first-fit spectrum allocation with fragmentation avoidance for dynamic flexgrid optical networks. *Optical Switching and Networking*.