

Berkay KÖKSAL

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Objective

An opportunity in a Data Science and IoT related field to improve current knowledge of software programming and hardware design skills

Technical Skills

Software

Python, C, C++, C#, VB.NET, SQL, Google Firebase, Android-Java/Kotlin, Xcode-Swift/ObjectiveC, Javascript, HTML/CSS, Assembly, MatLab, ElasticSearch, Apache Kafka, TensorFlow, Apache Spark, Jupyter, Webservers (Flask, Servlet), Canoe/CAPL
IoT Protocols (XMPP, MQTT, LoRa, RFID, AMQP, SomeIP)

Hardware

Vehicular Vector Hardware (VT, CAN, LIN, Eth Bus), CPU design, Pipeline design, Advanced computer architecture, RAM design, Arduino, Logisim, RFID transmitter and receiver

Combined

Parallel and Distributed Systems, Robotics (EV3, Gazebo, RVIZ, ROS), Discrete Event Simulations (GPSS), RISC/CISC instructions and hardware design

Related

Project Management, Software Engineering (UML, CI, JIRA, JUnit Testing), IT Law, Economics

Work Experience

- 2019 - Current *Groupe Renault*, Valbonne, France, Intern
- Design of vehicular simulation environment for test, validation and integration bench for CAN/LIN/Eth based application and services.
- 2018 *EURECOM Mosaic5G Slicenet*, Biot, France, Lab Researcher
- Development of a monitoring framework (ElasticMon) to facilitate data driven network applications on 5G mobile networks. Publication for IEEE GLOBECOM 2019
- 2017 *Prizma RFID*, Bursa, Turkey, Software Developer
- Client agile request handling, Development of RFID solutions and implementation to production line in Real-Time.
- 2016 *KoçSistem*, Istanbul, Turkey, Android Development Team
- Front-end responsive layout design and back-end functional coding.

Education

- 2017 – 2019 *EURECOM Sophia Antipolis / FRANCE / Internet of Things*, Master's Degree
- Machine learning and intelligent systems to train models for statistical data analysis and decision-making process.
 - IoT applications and protocols to process large amounts of data with energy and computing power constraints
 - Contributed open source projects
 - TTOOL ParisTech, Automated IoT Code generation
 - MOSAIC 5G Initiative, Data driven 5G mobile networks
- 2013 – 2017 *Istanbul Technical University / TURKEY / Computer Engineering*, Bachelor's Degree
- Database management systems and object-oriented programming to develop applications on different environments
 - Fundamentals of Linux kernel programming and computer hardware architecture with underlying combinational and sequential circuits
 - Developed the official mobile application of the university's winter festival İTÜKİŞ* Festival application ~ IOS and Android
- 2014 – 2015 *Malmö University / SWEDEN / Computer Science*, Erasmus+ Exchange Program
- Followed C# and VB.NET windows applications development course

Publications

- July 2019 “*ElasticMon: A Data-driven Elastic Monitoring Framework for 5G*”, Berkay Köksal, Xenofon Vasilakos, Navid Nikaein, Robert Schmidt and Nasim Ferdosian, IEEE GLOBECOM 2019 (Under Publication)
- June 2017 “*Design and Implementation of Fully Associative Instruction Cache Memory*”, Berkay Köksal and Assoc. Prof. Feza Buzluca, Graduation Project

Languages

Turkish: Native speaker
English: Near native speaker
French: Intermediate
Swedish: Beginner

Personal

Professional skiing, drawing, travelling, chess, bowling, billiard

References

Navid Nikaein
Associate Professor
Communication System Department
EURECOM, Biot FRANCE

Berk Canberk
Associate Professor
Electrical and Computer Engineering Department
Northeastern University, BOSTON Massachusetts USA

Dr. Damien Jade Duff
Lecturer
Computer Engineering Department
Istanbul Technical University, TURKEY

References available upon request