# Selahaddin Islamoglu

# Senior Software Developer

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# **Summary**

8 years of expertise in developing communication applications, software, and firmware solutions.

Demonstrated proficiency in collaborating effectively with diverse international teams. Highly skilled in C and C++ programming for Linux and RTOS platforms. Introductory experience in Go, Java, and JavaScript (Node.js). Actively building expertise in Backend Development with Go.

**Skills** 

**Programming** C, C++, Go, Java, and JavaScript (Node.js)

Protocols HTTP, FTP, MQTT, SIP, WebRTC, SNMP, LwM2M, OneM2M, NETCONF

TCP, UDP, SSL, RTP, RTCP, ICMP, STUN, TURN

Platforms AWS Cloud, GNU/Linux, Docker, OpenSIPS, FreeRTOS, Zephyr

**Tools** Git, GDB, Wireshark, Jira, Bitbucket, VSCode, Vim

Languages Turkish (Native), English (Proficient)

# **Experience**

#### **Career Transition**

**Backend Developer Candidate** 

APR 2025 - PRESENT

Transitioning into Backend Development with Go

- Taking time to focus on a career transition into backend development.
- Building expertise in Go language fundamentals, concurrency, and standard libraries through continuous learning and hands-on practice.
- Learning to design and implement RESTful APIs and gRPC services using popular Go frameworks such as Gin, Fiber, and Echo.
- Exploring Go-specific libraries and tools including GORM (ORM), sqlx, Cobra (CLI), Viper (configuration), Zap/Logrus (logging), and testing frameworks like Testify.
- Gaining experience with SQL and NoSQL databases (PostgreSQL, MongoDB, Redis), caching mechanisms, and message brokers like RabbitMQ and Kafka.
- Deepening knowledge of backend practices including microservices architecture and cloud-native development to build modern, maintainable applications
- You can track my learning journey and projects through my Developer Roadmap, explore my code on GitHub, and view my algorithm practice on HackerRank.

#### Orion Innovation Inc.

Senior Software Developer

JUL 2023 - MAR 2025

**Project: Contact Center Automatic Call Distribution** 

- Worked for Avaya Contact Center Extended Capacity product on the behalf of Orion Innovation.
- Participated in the takeover of a legacy project from a third-party vendor; contributed to resolving inherited technical issues during the transition.
- Focused on optimizing traffic switchover from active to standby systems during failure scenarios, improving system reliability and performance.
- Actively worked with SIP messaging protocols and OpenSIPS for call routing and signaling.
- Designed and implemented a data persistence capability for the Call Detailed Recording (CDR) feature across active and standby nodes. Developed user-space applications on Linux using C++.

#### **Project: Communication Server**

- Worked for Ribbon Communications C20 Call Controller product on the behalf of Orion Innovation.
- Worked on the platform module that underpins the communication server. Resolved gating bugs to support a successful and timely release.
- Addressing issues related to software management features such as install, upgrade etc. Utilized C++ for development on a Linux environment.

#### Cavli Wireless Inc.

Senior Firmware Developer Project: Cellular IoT Modules JUL 20 - AUG 21 | COVID DISEASE BREAK | JUN 22 - NOV 22

- Worked for development of Cavli Wireless C-Series IoT Modules product.
- Designed and implemented communication protocol APIs (FTP, HTTP, MQTT, etc.) for AT command interface to enhance system connectivity capabilities.
- Worked on the development of a cloud-based device management system for IoT modules.
- Successfully integrated these features into separate modules with diverse infrastructures.
- Programmed in C for both Linux and Real-Time Operating Systems (RTOS).

#### Netas Telecommunication Inc.

Software Developer

AUG 15 - DEC 17 | MILITARY SERVICE BREAK | AUG 18 - JUN 20

Project: WebRTC - SIP Gateway

- Worked for Ribbon Communications Kandy Link product on the behalf of Netas Telecommunication.
- Developed RTP media transportation layer capabilities and performance enhancement.
- Worked with communication protocols such as SIP, WebRTC, STUN, TURN, RTP, and RTCP.
- Implemented media layer modules for user space Linux applications using C programming.
- Gained experience in Java by contributing to the development of signaling modules for the gateway.

#### **Project: Multi Access EDGE Computing Gateway**

- An R&D project, developed with the support of TUBITAK.
- Participated in an edge gateway module implementation for the newly announced MEC standard.
- Developed a NETCONF configuration module for efficient configuration management.
- Used C for user space applications on Linux.

#### Project: OneM2M IoT Gateway

- An R&D project, developed with the support of TUBITAK.
- Participated a gateway module implementation for the newly announced OneM2M standard.
- Developed registration and data storage algorithms for user space applications on Linux using C programming.

# **Education**

#### Bachelor's degree in Electronics Engineering

Istanbul Technical University

ISTANBUL, TURKEY

2009 - 2014

### Graduate Project: Virtual Instrumentation Based Oscilloscope

The oscilloscope consist of 2 part; signal processing card and computer interface. The signal data sampled in a time windows on card is displayed according to desired criteria on the computer screen.

**Internship Projects:** Pool ionization system, Heart rate monitor, TURKSAT 3USAT Cube Satellite Communication Board

Student Projects: Chess playing robot arm, Retro dotmatrix game console, 8x8x8 LED cube.

Voluntering: Head of Laboratory Committee and Executive Board Member at ITU IEEE Student Branch

# **Projects**

#### Avaya - Contact Center Extended Capacity

Single-server solution for large contact centers supporting 30,000 agents and 60,000 UC users with up to 57,000 calls concurrently. Solution Description

# Ribbon Communications - C20 Call Controller

Provides call and session control, network connectivity, switching, signaling, protocol interworking, voice and communications for service providers. Solution Description

#### Cavli Wireless - C-Series IoT Modules

Cavli C-Series IoT modules are enterprise grade cellular connectivity modules with built-in eSIM/iSIM technology, pre-loaded with global cellular connectivity subscriptions powered by Cavli Hubble.

# **Solution Description**

#### **Ribbon Communications - Kandy Link**

Kandy Link is a WebRTC -SIP gateway that uses REST signaling on the web side and maps the REST signaling into compliant SIP signaling on the SIP communications network side. Solution Description