Sultan Umarbaev

SKILLS

Current personal activities

- Graphics programming with OpenGL and C++
- Rust programming language

General Experience

- Web application backend development in microservice architecture using Spring Boot, RabbitMQ, GraphQL, RESTful API
- Version Control with Git
- Docker/Docker Compose deployment
- Gitlab CI/CD configuration
- Comfortable with Linux systems
- Basic TUI programs/tools development using Rust with Ratatui
- Basic desktop application development using C++ with ImGui or Rust with egui
- Linux loadable kernel module (LKM) development using C
- Basics in Computer and Network Security, Database Management, Computer Graphics, Embedded Systems, Machine Learning

WORK EXPERIENCE

OJSC Optima Bank September 2022 - Present Back End Developer, Software Development Management Bishkek, Kyrgyzstan Microservices, Java, Spring Boot, PostgreSQL, GraphQL, RabbitMQ, REST APIs, Docker, Gitlab CI/CD, Grafana, Redis Worked on project Ontime Business (OB) remete banking system for legal entities

- Worked on project Optima Business (OB), remote banking system for legal entities
- Developed integral components of the OB (microservice architecture): business and validation rule engine service for payments, template-based document generation service, service for importing payments using 1C files, payment monitoring service, etc.
- Contributed on the development and maintainment of the main payment service in OB project
- Created PostgreSQL functions/stored procedures such as payment search with filters, pseudo-unique document number generation, etc.
- Assisted in configuring and setting up early versions of Gitlab CI/CD processes
- Assisted our DevOps engineer in maintaining and monitoring system infrastructure
- Performed research works on topic of Electronic Digital Signature specifically Rutoken technology and Simple Certificate Enrollment Protocol(SCEP)

FinanceSoft

Full Stack Developer

C#, .NET Core, Typescript, Angular, MSSQL, Transact-SQL

- Worked on projects: Loan Conveyor, Central Back Office(CBO)
- Performed the detection and fixing of the bugs/errors on the front-end and back-end of the existing conveyor
- Conducted the maintenance and upgrading of the existing features
- Implemented and added new components and features to a new conveyor for a new client according to the project requirements

May 2022 - July 2022 (3 mth.) Bishkek, Kyrgyzstan • Performed project updates on the test servers

National Academy of Sciences of Kyrgyzstan

Part-time Engineer, Institute of Automatics and IT

C/C++ with Arduino, Mosquitto, Telegraf, InfluxDB, Docker

- Worked on the project of developing a prototype of air pollution monitoring system for Bishkek
- Conducted market research on transceivers and sensor devices
- Implemented early version of data management architecture using Mosquitto, Telegraf, InfluxDB, Grafana and Docker technologies
- Implemented basic mesh network using NodeMCU devices (with ESP8266 WiFi chips) to transmit data between nodes and store it in database

EDUCATION

Sapienza University of Rome

MS in Engineering in Computer Science

- **Completed courses:** Algorithm Design, Distributed Systems and Computer and Network Security, Network Infrastructures, Formal Methods, Embedded Systems, Machine Learning, Software Engineering, Data Management
- **Covered courses:** Advanced Operating Systems and Virtualization, System and Enterprise Security, Computer Systems and Programming, Security Governance, Web Security and Privacy

American University of Central Asia

BA/Bachelor of Software Engineering

PROJECTS

Simple DLL injector with GUI (dll-inj) | C++14, ImGui

in development

• Implemented a simple DLL injector with GUI for educational purposes only

User Mode thread Scheduling (UMS) for the Linux distribution | C, Make, Doxygen

- Implemented UMS kernel module in C programming language that allows programs in the user mode to schedule their own threads without involving the kernel scheduler
- Implemented UMS library in C programming language which allows to use the implemented UMS mechanism
- Documented the code of the project using Doxygen, an automation tool for generating the documentation
- Wrote a report briefly describing the project results, AOSV-project report

2020 - 2022 (Not Completed) Rome, Italy

Bishkek, Kyrgyzstan

2016 - 2020

post link

post link

December 2019 - May 2020 (6 mth.) Bishkek, Kyrgyzstan