Mate Kopaliani

Computer Science / Math (minor)

Kutaisi International University, Georgia

✉ matekopaliani12@gmail.com   ⓞ GitHub   in LinkedIn

EDUCATION

•**Kutaisi International University**   *3-Year Program*

Computer Science, Math Minor   Bachelor's Degree

EXPERIENCE

•**.NET Back-End Developer Intern**   *suliko.ge*

Working on backend development using .NET framework   SULIKO AI Startup

•**Teaching Assistant**

Linear Algebra course support and student mentoring   Kutaisi International University

CURRENT RESEARCH

•**Bachelor's Thesis**   *2024*

Fully Verified Floating Point Unit (FPU) Construction in Verilog   In Progress

– Designing IEEE-754 compliant FPU with comprehensive verification testing in Rust

TECHNICAL SKILLS

Programming Languages: Java, Python, Rust, C++, JavaScript, SQL (MySQL, PostgreSQL), Verilog

Web Technologies: HTML/CSS, React, Spring Boot

Tools & Technologies: Git, Linux, LaTeX, Typst

Mathematics: Linear Algebra, Linear Optimization, Probability, Real & Numerical Analysis

Hardware Design: Pipelined CPU, FPU, Cache Systems

Languages: Georgian (Native), English (Advanced)

CERTIFICATIONS

•**Java Development with Spring Boot**

Professional development certification   EPAM

•**Backend Programming with Django**

Python web development certification   New Horizons

•**PCAP - Certified Python Associate**

Python programming certification   Python Institute

PERSONAL PROJECTS

•**Image Edge Detection Algorithm**   *GitHub Page*

Edge detection implementation using data interpolation and numerical methods

– Python, NumPy, Linear Algebra, Numerical Analysis

•**Sturm-Liouville & Trajectory Analysis**   *GitHub Repository*

Numerical solution of differential equations with ball trajectory calculations

– Python, Numerical Analysis, DBSCAN, Implicit Runge-Kutta Methods

•**Full Stack Library Management System**   *GitHub Repository*

Complete web application for book management with user authentication

– MySQL, Java Spring Boot, React, TypeScript

- **Multi-language Hotel Management Interface**   *GitHub Repository*

  Responsive hotel management frontend with internationalization support

  – JavaScript, React, CSS, Kinde Authentication API

- **PinguChat - Multi-user Chat Application**   *GitHub Repository*

  Real-time communication system using Java sockets and multithreading

  – Java, Multithreading, Socket Programming, Stream API

– MySQL, Java Spring Boot, React, TypeScript

- **Multi-language Hotel Management Interface**   *GitHub Repository*

  Responsive hotel management frontend with internationalization support

  – JavaScript, React, CSS, Kinde Authentication API

- **PinguChat - Multi-user Chat Application**   *GitHub Repository*

  Real-time communication system using Java sockets and multithreading

  – Java, Multithreading, Socket Programming, Stream API