

Summary

Aspiring Software Engineer with experience in full-stack development, data analysis, and scalable application design. Proficient in C, Python, React TypeScript, Java, SQL, with hands-on expertise in building dashboards, data validation tools, RESTful APIs, and automation tools by leveraging best practices and modern technologies such as containerization and cloud computing. Passionate about solving complex problems and contributing to impactful software solutions in collaborative environments.

Education

Eötvös Loránd University
Bachelor of Science in Computer Science
GPA: 4.74/5.00

Feb 2022 – Jun 2025 (Expected)
Budapest, Hungary

- **Activities:** Google Developer Group ELTE Technical Lead, International Student Ambassador, International Student Advisory Committee Representative, SH and ESN Student Mentor.
- **Relevant Coursework:** Linux/Bash, Cloud Computing (Docker, Kubernetes, AWS), Cryptography, Go Language, SQL, ML/AI, DSA, Web Security, Programming Paradigm, Advanced Web Programming
- **Summer School:** University of Maastricht 2024 (**GPA: 10/10**), University of Utrecht 2025 (**GPA: 10/10**)

Working Experience

Student Researcher
Eötvös Loránd University – Modelling Lab

Dec 2024 - present
Budapest, Hungary

- Conducting advanced research on Explainable AI methodologies focused on generating post text-based explanations for ECG model outputs using LLMs while maintaining its medical interpretation accuracy.
- Integrating pre-trained Variable Projection Network (VPNet) models to analyze and elucidate relationships between inputs and outputs, enhancing model transparency and interpretability.

AI Trainer
Outlier

Nov 2024 – present
San Francisco, USA

- Training large language models (LLMs) to address failure scenarios by designing and providing technical and coding prompts, mainly in Python, Java, and SQL.
- Evaluating AI-generated code outputs, identifying errors, and providing accurate, executable solutions to ensure task completion while enhancing code efficiency, reliability, and scalability across various use cases.
- Developing and debugging comprehensive test cases to ensure the generated code functions correctly, performs optimally, and handles all edge cases, guaranteeing 100% reliability.

Junior Software Developer
Qneiform

Jun 2024 – Oct 2024
Budapest, Hungary

- Developed an automated scraping tool with Python, Flask, and BeautifulSoup, enhancing market research efficiency.
- Developed and deployed full-stack dashboards (React TSX and Flask) to provide real-time insights on hiring costs, competitor analysis, and database performance.
- Improved internal operational efficiency by extending the Slack bot for desk booking and streamlining resource management.
- Conducted data analysis using Python, delivering actionable insights for strategic HR and business decisions.
- Hands-on experience on AWS (S3, DynamoDB, GraphQL) and RESTful API design.
- Built a desktop app with Flask for automated data validation and correction, utilizing regex patterns and data-matching algorithms, significantly improving database consistency and reducing manual intervention.

Data Scientist Intern
The Estée Lauder Companies Inc.

Oct 2023 – Jun 2024
Budapest, Hungary

- Developed and optimized SQL queries for data extraction on the OBIEE platform.
- Conducted data preprocessing and exploration using Python, facilitating data visualization in Power BI.
- Performed mass data uploads for salary, bonuses, and other HR-related data, ensuring 100% accuracy and consistency across payroll systems.

- Analyzed employee data and salary reports from 10+ countries using VBA and Excel formulas to identify and report discrepancies between legacy and new databases during a global payroll migration project, ensuring 100% data accuracy and compliance.
- Resolved tickets related to employee data issues, troubleshooting and correcting discrepancies to maintain data integrity and compliance.
- Automated data management tasks using Oracle PUI and UI Path, streamlining HR and payroll operations.

Web Development Intern
Lime Light Renhold**Oct 2023 – Feb 2024**
Oslo, Norway

- Developed frontend solutions using React TypeScript, Tailwind CSS, and prototyped with Figma.
- Managed the complete SDLC for web features, from conceptualization through deployment, using Git for version control and Jenkins for CI/CD.
- Integrated OAuth 2.0 with Firebase for user authentication and authorization.
- Built and developed the database using MongoDB and MySQL.
- Conducted code reviews and testing with Jest and React Testing Library.

Projects

Income Classification Using Machine Learning**Oct 2024**Link to the project: <https://github.com/helloimrizy-pages/Income-Classification-Project>

- Engineered features, handled class imbalance with SMOTE, and built optimized machine learning models (XGBoost, Random Forest, SVM), achieving 86.58% accuracy while ensuring interpretability with LIME and performance evaluation using precision, recall, and AUC-ROC.

Interactive City Exploration Game with Location-Based Riddles**Dec 2024**Link to the project: <https://github.com/helloimrizy-pages/Budapest-City-Escape>

- Developed an interactive city exploration game using React (TypeScript), TailwindCSS, OpenStreetMap, and QGIS, integrating a location-based riddle-solving experience with dynamic maps, real-time passcode validation, and historical storytelling, enhancing user engagement through an immersive gamified adventure.

Skills

Programming: Python, Bash, SQL, Java, C#, C++, C, TypeScript, JavaScript**DevOps Tools:** Docker, Kubernetes, Jenkins, Terraform, Helm, Git, GitHub**Frameworks:** Flask, React, TailwindCSS, Material UI**Databases:** MySQL, MongoDB**Cloud Platforms:** AWS (S3, DynamoDB, GraphQL), Firebase/Firestore**Methodologies:** Agile (Scrum/Kanban), Software Design Patterns, Best Practices**Other Skills:** RESTful API Design, Linux Environments, Networking Concepts, kpt (familiarity), Explainable AI, LLMs**Certificates**

LinkedIn Learning: [Docker](#), [Kubernetes](#), [Jira](#), [Jenkins](#), [Git](#), [APIs and Web Services](#), [Agile Software Development](#)**Udemy:** [DevOps Beginner to Advanced](#), [Kubernetes with Helm](#), [Network & Socket Programming](#)**Cisco Networking Academy:** [IoT Fundamentals: Big Data & Analytics](#)**Awards**

- 4th Place – JunctionX Budapest Hackathon 2024 (Sustainable Challenge)
Developed a real-time object detection mobile app for identifying types of recycling.
- Stipendium Hungaricum Scholarship Recipient.
- Indonesian Ministry of Research and Technology Scholarship Recipient

Reference/Recommendations

- Dóra Takács - Acting Business Transformation Senior Analyst. A former manager at The Estée Lauder Companies Inc. (dtakacs@hu.estee.com)