

Borbála Szilágyi

Software Development Engineer – Team Lead

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SUMMARY

Software Engineering Team Lead with a strong background in railway safety-critical development. Delivers new features and continuous improvements, leveraging AI-assisted tooling to accelerate development and raise product quality.

SKILLS

- **Languages:** Java (21, Stream API), TypeScript, JavaScript, Python
- **Backend & Web:** Spring, Spring Boot, REST APIs, Node.js, Express.js
- **Frontend:** React, Vaadin, JavaFX
- **Databases:** SQL (PostgreSQL), ORM (Hibernate)
- **Model-Driven Engineering:** Eclipse Modeling Framework, Xtext/Xtend, Ecore/Xcore
- **DevOps & Testing:** Git, Maven, Gradle, Jenkins, Docker, Kubernetes, JUnit
- **AI Tooling:** Claude Code (Anthropic), ChatGPT/Codex

EXPERIENCE

Prolan Irányítástechnikai Zrt.

Software Engineering Team Lead

May 2024 – Present

- Led a cross-functional Scrum team of 4 developers, owning people management, technical direction, and end-to-end delivery across 4 software products.
- Ran 2-week sprint ceremonies and refined the backlog weekly, delivering 379 resolved tickets in 2025 (+7% year-over-year) against 33% more incoming demand.
- Owned architectural decisions across the product portfolio, balancing long-term maintainability with delivery pressure.
- Drove adoption of AI-assisted development using Claude Code, lifting feature delivery by 30%.
- Supervised a Master's thesis and mentored interns.

Products led at Prolan:

ProrisCAD (Desktop application) – Railway safety systems designer and parameterisation software.

Tech stack: Java, Eclipse Modeling Framework, Maven, Ecore/Xcore, Xtext/Xtend, Graphiti.

Titanium (Web application) – End-to-end component and inventory management for manufacturing and production environments.

Tech stack: Java, Spring, Postgres, Vaadin, Maven, Docker, React, TypeScript.

WebDiag (Web application) – Real-time diagnostics, data collection, fault analysis, and reporting for railway signalling stations.

Tech stack: Java, Spring, Postgres, Maven, Docker, React, TypeScript.

DisCom (Desktop and web application) – Cross-border railway communication software providing translation between languages.

Tech stack: Java, Swing, Node.js, Express.js, React, Postgres, Maven, Docker.

Software Development Engineer

Jul 2022 – Apr 2024

- Contributed to the architecture and implementation of the ProrisCAD parametrization software.

Budapest University of Technology and Economics

Teaching Assistant – Formal Methods

Spring 2022

- Constructed and reviewed midterm tests; held consultation classes.

aiMotive Kft.

C++ Developer Intern

Sep 2020 – Mar 2021

- Participated in the development of the aiDrive autonomous driving modul.

EDUCATION

Eötvös Loránd University

2023 – 2025

Master of Business Administration (MBA)

Major: Finance. Minor: Management. Grade: Excellent with highest honours.

Thesis: "Valuation of a company operating in the Electrical & Automation industry".

Budapest University of Technology and Economics

2021 – 2023

Master of Science in Computer Science Engineering

Major: Critical Systems. Minor: Mobile Software Development. Grade: Excellent with highest honours.

Thesis: "Application of model generation techniques in the SysMLv2 system modelling language".

Budapest University of Technology and Economics

2017 – 2021

Bachelor of Science in Computer Science Engineering

Major: Systems Engineering. Grade: Excellent with highest honours.

Thesis: "Mapping state machine based component models to process models".

LANGUAGES

English: Proficient · **German:** Basic