JAKUB JURKIAN

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ABOUT ME

Computer Science student (2nd year) seeking a Summer 2026 internship (Backend / DevOps / Software Engineering). Developing skills in Fullstack architecture (.NET/React) and deploying containerized applications in the cloud (**Microsoft Azure**). Looking for an environment to grow under the guidance of an experienced team, bringing solid programming fundamentals and dedication. Available full-time during the summer and part-time during the academic year.

TECHNICAL SKILLS

Backend & Engineering: **C#**, **.NET**, Node.js, Go, Python, Java, REST API.
Frontend: **TypeScript**, JavaScript, **React**, Next.js, Tailwind CSS.
DevOps & Infrastructure: **Microsoft Azure**, **Docker**, Linux Administration, Bash, CI/CD, TCP/IP, MQTT.
Databases: SQL Server, PostgreSQL, MongoDB, Entity Framework.
Tools & Methodologies: Git, Code Review, Test Automation (xUnit).

PROJECTS

Smart Home Simulator (IoT) | *.NET, Azure, Docker* | GitHub   2026
   − Designed an IoT architecture simulating devices via a **TCP** server and **MQTT** protocol, powered by a high-performance **ASP.NET Core** and **Entity Framework** backend.
   − Deployed a serverless architecture in **Microsoft Azure**, hosting the application in containers (**Azure Container Apps**), frontend in **Static Web Apps**, and data in **Azure SQL Database**.
   − Ensured high system stability and facilitated the CI/CD process by achieving over 80% integration test coverage using **xUnit**.

Temporal Resource Allocation (VeloCity) | *React, TypeScript, Redux* | GitHub   2025
   − Developed an SPA for e-bike fleet management featuring a custom **temporal collision detection algorithm**.
   − Designed a billing algorithm ensuring uniform pricing across all e-bikes, where total cost depends exclusively on the number of rental days.
   − Optimized frontend performance utilizing memoization and lazy loading to effectively handle large datasets.

Social Network (Nodewave) | *TypeScript, Express, MongoDB, EJS* | GitHub   2024
   − Built a multi-layered security system: session authentication with **bcrypt** and **connect-mongo**, password reset via one-time tokens with TTL, and authorization middleware protecting all sensitive routes.
   − Designed a data schema in **MongoDB** enabling relationships between users, posts, and interactions, with atomic avatar updates propagated to all related documents.
   − Implemented input validation at every layer (**express-validator** + MIME type validation in **multer**), minimizing XSS attack vectors and unauthorized file uploads.

EDUCATION

University of Gdańsk   Gdańsk, Poland
Computer Science (2nd Year, Full-time)   *2024 – Present*
   − **Specialization:** Systems Programming (Golang) and Databases.
   − **Main coursework:** Algorithms & Data Structures, Operating Systems, Cloud Technologies, Computer Networks, Automated Testing.
   − **Availability Strategy:** The 6th semester (from January 2027) is fully dedicated to professional internships, enabling full-time employment.

IT Technical School (Maciej Rataj ZS)   Reszel, Poland
IT Technician Diploma (Specialization: Administration and Programming)   *2019 – 2023*

LANGUAGES

English: B2+ – working with technical documentation, proficient verbal and written communication.
Polish: Native.