Aleksander Paliwoda

+48 667 667 888 | alek.paliwoda@interia.pl | linkedin.com/in/aleksander-ribbz-paliwoda | github.com/RI88Z

Education

Warsaw University of Technology **Expected Graduation: Feb 2027**

Bachelor of Engineering (B.Eng.) in Computer Science *Warsaw, Poland*

- Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Software Engineering, Databases, Operating Systems, Computer Architecture, Machine Learning.

Projects

Job Board Web App | *Source Code* **React | REST API | GCP | Jenkins**

- Built a responsive frontend in **React** (Context API, Media Queries), communicating with the backend via **REST API**.
- Ensured robust frontend-backend synchronization by handling asynchronous data fetching and HTTP status codes.
- Gained practical experience with CI/CD and cloud tools, utilizing **Jenkins**, **Google Cloud Storage**, and **Jira**.

Smart Document OCR & AI Assistant | *Source Code* **FastAPI | Python | React | RAG**

- Designed a document processing backend in **FastAPI** and Python (OOP), utilizing the **Tesseract** engine.
- Implemented persistent user sessions and state management, avoiding redundant document re-processing.
- Integrated a **RAG** architecture (Google Generative AI, spaCy) enabling semantic search and AI assistance for documents.

Eye-tracking Analytics Platform (Open Source) | *Source Code* **Spring Boot | React | EyeGestures**

- Contributed to a full-stack open-source tool for ad creators, implementing features in **Spring Boot** and **React**.
- Collaborated within a public repository, actively contributing to issue resolution and architectural decisions.
- Followed best practices by participating in Code Reviews (Merge Requests) and using formatting tools like Prettier.

Decision Tree Algorithm | *Source Code* **Python | NumPy | Scikit-learn**

- Implemented a custom decision tree classifier with roulette wheel selection entirely from scratch in Python.
- Validated the model on classic datasets (e.g., Iris) achieving 96% accuracy and optimizing computations with **NumPy**.

EURO 2024 Simulator | *Source Code* **C++ | OOP**

- Developed a **C++** console application simulating a tournament based on player statistics parsed from CSV files.
- Applied advanced Object-Oriented Programming concepts (polymorphism, abstract classes) to manage match states.

Certifications

- **First Certificate in English (FCE)** – Cambridge Assessment English (Aug 2022) | *Ver. No: B9204906*
- **ACERT (Academic Certificate in English)** – Warsaw University of Technology (Sep 2024) | *Cert. No: 512/2024*

Skills

Programming Languages: Python, JavaScript, Java, C/C++, C#, SQL, HTML

Libraries/Frameworks: React, FastAPI, Spring Boot, .NET, Scikit-learn, NumPy, PyTorch

Developer Tools: Git, Jenkins, GCP (Storage), Jira, Nexus

Concepts & Architecture: OOP, REST API Design, RAG Architecture, CI/CD Basics

Languages: Polish (Native), English (Advanced/C1), German (Intermediate/B1), Spanish (Basic/A1)