Mikolaj Hilgert

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SKILLS

Technologies	C# (.NET), Python, Java (Spring), Javascript (NestJS), Scala, Azure, Spark, Hadoop, Airflow, LangChain, Pinecone, Kubernetes, MongoDB, Docker
Tools	Git, SQL, Adobe Suite, Office, Cinema4D, Postman, LaTeX
Languages	English (native), Polish (native), Czech (proficient), German (B1)

EXPERIENCE

Data Science Internship (Full-Time)   **Feb 2024 — Present**
ASML   *Veldhoven, The Netherlands*

- Thesis title: Impact of parallel unscheduled machine downs on eXtreme Long Down (XLD) frequency of DUV lithography systems.

Trainee Software Engineer (Part-Time)   **Mar 2023 — Nov 2023**
CM.com (Building Blocks)   *Tilburg, The Netherlands*

- Collaborated on improving the AI Decisioning Engine which supplies mass consumer data personalisations, increased conversion rates, order value and lower returns for clients like Coca-Cola, Corendon, Blokker and Basic-fit.
- Enhanced the IntelliJ IDEA development plugin, which was utilised on a daily basis by over 20 data scientists, expediting the development cycle and streamlining the delivery of tailored solutions for all Building Blocks' clients.

Software Engineering Internship (Full-Time)   **Sep 2022 — Feb 2023**
CM.com (Building Blocks)   *Tilburg, The Netherlands*

- Implemented an advanced user detail encryption module to a mature multi-million-line codebase, enhancing data security and GDPR compliance.
- Utilized Apache Spark for efficient large-scale data processing, successfully executing load tests on datasets comprising millions of records and achieving results within sub-second latency.
- Developed a data loader for Building Blocks' proprietary platform for files stored in Azure Blob Storage. The data loader was used to fetch data for basket prediction, anti-churn AI models as well as boosting efficiency of workflows, improved system observability and data integrity, while simultaneously eliminating the need for custom code.

Research Student Internship (Part-Time)   **Feb 2019 — Jun 2019**
Microsoft   *Prague, Czechia*

- Conducted Market research on Quantum computing and presented findings for an internal Hackathon.

NOTABLE PROJECTS

Full-Stack Developer   **Sep 2023 — Jan 2024**
LabelGenius - Individual University project

- An online platform that connects data providers with skilled labellers, streamlining image data labeling to create high-quality data-sets that are used in AI and machine learning applications.
- Developed a micro-service architecture in C# using .NET 6.0, with deployment to a managed Kubernetes cluster.
- Integrated with various Azure solutions to enhance performance, scalability and security of the application.
- Source code can be found on my GitHub profile.

Full-Stack Developer   **Sep 2023 — Jan 2024**
CY2 - Group University project

- Lead a team of 6 Fontys students, supervising project progress and delivering presentations to CY2 leadership.
- Developed a multi-tenant Chatbot FAQ system designed to answer questions from a custom knowledge base comprised of PDF files. The system leveraged the advanced conversational capabilities of OpenAI's Language Model for enhanced user interactions.

Data Pipeline Developer   **Sep 2021 — Jan 2022**
Canon - Group University project

- The system is used to process raw printer data and display results on a dynamic dashboard.
- Collaborated in a high-performing team of 5 within a Scrum agile framework.
- Contributed to the design and development of an ETL data pipeline using Python and Apache Airflow.

EDUCATION

Pre-master in Data Science in Business and Entrepreneurship, *JADS (Tu/e & Tilburg University)*   **Grade: 8.0**   Jan 2023 — Jul 2023
Bachelor of Science in ICT & Software Engineering, *Fontys University of Applied Science*   2020 — 2024