Mete Aksoy

Delft, The Netherlands | meteaksoy531@gmail.com | 06 21 60 8385 | linkedin.com/in/mete-aksoy

github.com/meteaksoyy

Education

Technical University of Delft, BS in Computer Science and Engineering

- **Coursework:** Object Oriented Programming, Functional Programming, Data Mining, Big Data Processing, Machine Learning, Algorithms and Data Structures, Computer Graphics, Web and Database Technologies

Work Experience

Software Engineering Intern, Dutch Ministry of Defense, KIXS IT Innovation Unit - Amersfoort, The Netherlands

- Developed AR-HUD systems on the **Magic Leap 2** platform. Implemented spatial anchoring for data overlays in dynamic and low-light conditions using Unity, integrated with **HLA-based** simulation software via **Pitch pRTI**.

Software Engineering Intern, PYM Automotive - Istanbul, Turkey

- Supported the development and automation of software tools for automotive remanufacturing machinery, improving system efficiency and data tracking process by 8%.
- Collaborated with engineers to enhance machinery diagnostics and design workflows using Python and CAD-based tools.

Projects

Housing Monitor Bot

- Built an automated housing listing monitor in **Python**, detecting new entries via API polling and sending real-time email alerts.
- Deployed initially using **GitHub Actions** (scheduled workflow) and later migrated to **AWS EC2** for higher-frequency cron execution and persistent uptime.
- Integrated **Selenium** to automatically apply to newly available housing listings as soon as they were detected, after confirming permissibility by inspecting each website's `robots.txt`.

Splitser

- Implemented a group expense-settlement system using **Java Spring Boot** with a REST API and **JavaFX** client.

Data Mining Algorithms

- Built algorithms for anomaly detection, recommendation, and clustering using **Python**, NumPy, pandas, and scikit-learn.
- Applied dimensionality reduction (SVD), clustering (K-Means++, DBSCAN), and anomaly detection (Isolation Forest, PCA) to large datasets for improved pattern discovery.

Assembly x86-64 Hobby Projects

- Built a Brainf*ck interpreter, a custom `printf`, a simplified Unix `diff`, and bitmap-based message encryption.

Racing Simulator

- Created a career-progression racing game with vehicle dynamics using **Unreal Engine** and **C++**.

Ray Tracing Renderer

- Implemented environment mapping, bloom filtering, texture mapping, and multisampling in **C++** with **OpenGL**.