

# Iasonas Chronis

## EDUCATION

---

- Delft University of Technology** Delft, Netherlands  
*B.Sc. Computer Science and Engineering (Variant Track: Data)* 2024 – 2027
- Relevant coursework: Algorithms and Data Structures, Algorithm Design, Web and Database Technologies, Big Data Processing, Data Mining, Information and Data Management, Probability and Statistics.
  - GPA: 8.3 / 10

## PROJECTS

---

### NetNote — Note-Taking Application | *Java*

- Built a client-server note platform using Spring Boot (backend) and JavaFX (frontend) in a team of 5.
- Implemented Markdown live preview, tagging, file attachments, and real-time sync via WebSockets
- Worked in Agile/Scrum using GitLab for collaboration and version control, tested with Mockito/JUnit.

### KinoDex — Movie Recommender Web App | *React, Node.js*

- Developed full-stack web app with REST APIs, PostgreSQL Integration and JWT-based authentication.
- Integrated OMDb API and built a structured database schema and secure backend logic.

### Brainfuck Interpreter | *x86-64 Assembly*

- Implemented an interpreter with instruction parsing, memory tape management, and console I/O.
- Reduced execution time by ~25% on benchmark programs.

### End-to-End Anomaly Detection - Machine Learning Pipeline | *Numpy, Pandas*

- Built PCA reconstruction pipeline: preprocessing, feature engineering, model training, and evaluation.
- Achieved 83% anomaly detection accuracy by crossvalidating hyperparameters on real sensor data.

### Recommender System — MinHash & LSH | *Numpy, Pandas*

- Implemented MinHash signatures and LSH banding for fast approximate neighborhood retrieval.
- Benchmarked with Precision@K, Recall@K, and Accuracy.
- Built reproducible CLI and tutorial notebook for grid search and experimentation.

## LEADERSHIP & ACHIEVEMENTS

---

### ASTRO Pi Mission Space Lab (ESA & Raspberry Pi)

- Designed Python experiment analyzing correlation between air pollution and cloud altitude.
- Selected for Phase 2 deployment on the International Space Station.
- Collected and analyzed real ISS sensor data.

### TU Delft Impact Contest (YES!Delft) — Ideation Phase

- Conceptualized Embryo, ultrasound-based diagnostic system for early prenatal anomaly detection.

### TU Delft DAPC Programming Contest — 5th Place

- Solved algorithmic challenges under strict time constraints in a team-based contest.

## SKILLS

---

**Programming Languages:** Java, JavaScript (React / Node.js), Python (NumPy / Pandas), SQL, Scala, C++, x86-64 Assembly

**Technologies:** Git, PostgreSQL, REST APIs, Spring Boot, Unix/Linux

**Languages:** Greek (native), English (fluent), German (intermediate), French (basic)

**Other Interests:** Digital art and illustration, weightlifting, running, skiing