



PROGRAMMING SKILLS

- **Languages:** Python, Java, C#, SQL, Prolog, CSS, HTML
- **Technologies:** PyTorch, Pandas, TensorFlow, NLTK, NumPy, SciPy, Scapy, Sklearn, PuLP, Unity

PROJECTS

- **Bachelor Thesis** Built a **Transformer** and **Perceiver**, Optimized them using weights and biases, examined/compared their architecture and performance in Autoregressive Modelling. **(Deep Learning) Grade: 8.0**
- **Generating Impact Stories** Building a **self-validating multi-agent system** that generates impact stories summarizing academic research papers to templates, to attract readers and attention towards academia.
- **Predicting stock price movements using genetic algorithms** Built a **genetic algorithm** that predicts the fluctuation of stock prices based on numerous technical indicators (SMA, EMA, TBR, MACD, VOL, MOM, etc.)
- **Recruitment Recommender System** Built a **recommendation system** that helps the board in hiring decisions based on applicant profiles and job requirements.
- **Sous-Chef Agent** Built a **conversational agent** using Google's DialogFlow to develop patterns/understanding and act as a real-time sous-chef to the user.
- **Video Games Development** Built a 3D infinity runner game that incorporates complex game mechanics, and a 3D 3rd person shooter.

EDUCATION

- **MSc Data Science - University of Amsterdam** Amsterdam, Netherlands
Sep. 2024 – Sep. 2025
- Courses: Applied Machine Learning, Natural Language Processing, Statistics, Simulation & Optimization
- **BSc Artificial Intelligence - Vrije Universiteit Amsterdam** Amsterdam, Netherlands
Sep. 2020 – July 2024
- Courses: Machine Learning, Data Science, Data Structures & Algorithms, Multi-Agent Systems, Linear Algebra
- **BSc Artificial Intelligence (Exchange) - University of Kent** Kent, United Kingdom
Sep. 2022 – Jan. 2023
- Courses: Computational Intelligence, Computing Law, Video Game Development

EXPERIENCE

- **YB Tennis Coaching (Self-Employed)** Amsterdam, Netherlands
Tennis Coach
Oct 2021 - Present
 - Managing my personal tennis school. Prepared club teams for regional competition, and organized camps.
 - Coached over **400 adults and children** at two of the largest tennis academies in Amsterdam (Inspire, Higgins).
- **Freelance**
Web Developer March 2022 - September 2022
 - Modified websites and provided coding guidance to clients.
- **Volunteer** Tunisia, Tunisia
Coding Teacher Summer 2024
 - Gave introductory Python lessons to a small group of young teenagers.

LANGUAGES

Native: English, Arabic, French **Elementary:** Dutch