# Matthew Ediz Çokran Beadman

# **Engineering Mathematics Graduate**



**CAREER OBJECTIVE** 

I apply mathematics, computation, and programming to build ethical and impactful solutions in AI and data technologies.

Driven to grow and collaborate, I am determined to stay relevant throughout my career where I've contributed to ambitious, team-based projects; my technical strengths converge in solving real-world problems across automation, data analysis, simulation and AI.

I value accuracy and integrity, and favour a methodical, modular, and disciplined approach to the challenges I face. Following my strengths and ambitions; I seek a role in technology and R&D where I can develop scalable and intelligent systems.

#### **CONTACT INFORMATION**



+90 539 681 4961



matthewediz247@gmail.com



linkedin.com/in/matthew-edizbeadman-0812a3251



Kadıköy, İstanbul



https://itsdaeka.github.io/portf olio/

#### **HOBBIES**

#### **LANGUAGES**



- English -Citizen
- Turkish -Citizen

# **EDUCATION**

#### **2024 BACHELOR'S DEGREE**

Bachelor of Engineering in Engineering Mathematics, 1st Class with Honors,

University of Bristol

#### 2018 ADVANCED LEVEL CERTIFICATE

AAAA in Mathematics, Further Mathematics, Physics & Chemistry

Wheatley Park School

### 2016 IGCSE CERTIFICATE

A\*A\*A\*AABC in Mathematics, First Language English, English Literature, Combined Science, History, Geography & First Language Turkish

Istanbul International School

# **WORK HABITS**

- Modular Work Ethic
- First Principles Solution Design
- Diligent Attitude
- **Proactive & Positive Energy**
- Inquisitive Practitioner
- Creative Approach

# INTERESTS

- Natural Language Processing & LLM
- Reinforcement Learning
- Statistical Modelling & Inference
- Simulation & Virtual Environments
- CI/CD Pipelines
- Al Ethics and Limitations
- Cloud Infrastructure
- Data Modelling & Analysis
- Self-Supervised Learning
- **Probabilistic Programming**
- Al Agents & Autonomous Systems

# REFERENCES

**Pinar Köse Kulacz** +90 549 263 3675 Senior Director, Telenity

Zakir Erimbetov +90 554 397 7324 Mathematics Teacher & Robotics Specialist, IIS

# **PROJECT PORTFOLIO**

### **AUTOMATED WAAM SLICING FOR A** AN AXIS SYMMETRIC PART

Python Scripts within a Grasshopper environment applied to automate the generation of a viable toolpath, given production parameters, for the production of arbitrary axis symmetric parts using WAAM technology.

### **PYTHON SCIENTIFIC PROGRAMMING LIBRARY**

High level scientific library capable of solving ODEs, PDEs and conducting bifurcation analysis; dependent on NumPy only.

#### AI REINFORCEMENT LEARNING **AGENTS**

Reinforcement learning algorithm applied to the Santa Fe Trail problem, which programmed the agent to probabilistically learn the correct path. This was compared to a more conventional evolutionary finite automata, with competitive results in replicability and convergence time.

#### AI MUSIC GENRE CLASSIFICATION

A DNN and a finetuned automatic speech recognition model were trained to classify music files by their genre. Both models were shown to have competitive results in classifying most genres, and could be combined in an ensemble model to achieve superior results.

# **TECHNICAL PROFICIENCIES**

- OOP principles in Python & C++
- Machine Learning and Al model development with PyTorch, scikitlearn and Hugging Face
- Data Analysis with Python & SQL
- Linux & GitHub for Version Control and Environment Management
- Technical documentation in Latex & Microsoft Office

