EGE HOSGUNGOR

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EXPERIENCE

Senior Data Scientist

Ocado Technology

2022 - Present

- Leading Crash Detection Project A Computer Vision System where we create object detection models specialized on bots and use them in real time on our bots
- Led Wireless Signal Forecasting Project as a Technical Lead: utilized machine learning and unique signal data from our bots to forecast wireless network coverage and foresee complications beforehand in our warehouse designs, reduced risk of losing millions of \$ per CFC.
- From Accelerometer to 3D Printing Data working projects to improve Ocado's robotic operations.

Reinforcement Learning Engineer **Dcipher Analytics**

2020 - 2022

- Implemented RL algorithms / environments for NLP domain: Automated Sentiment Analysis on stock markets **Gym**, **TF**, **Ray and GCP**.
- Led an end-to-end multi class, multilabel machine learning project for Avalanche Risk Prediction funded by TUBITAK.

Software Engineer

KARMA Lab Immersive Technologies

2018 - 2019

- Coordinated KARMA Lab's 3 VR/AR/MR projects: KU-TWIN, Isles of Emotion, Psychosis
- Led a group of 15 people from different backgrounds including professionals, PhDs, and grad students.
- Worked on creating a simulation/ "Digital Twin" of campus for VR by utilizing photogrammetry techniques and Unity.

EDUCATION

MSc Advanced Computer Science University of Sussex

2019 - 2020

- Dissertation: "Pandemic Simulation with Reinforcement Learning"
- Area Courses: Machine Learning/ Engineering Reliable and Scalable Project / E-Commerce Systems
- **❖** Distinction, First Class Honor (4.0 GPA)

BSc Mechanical Engineering

Koc University

2014 - 2019

- Senior Project: "A Haptic Feedback Glove for Virtual Reality" Best Engineering Project Award.
- Area Courses: Rocket Propulsion / Finite Element Analysis /Corporate Dynamics for Engineers

PROJECTS

- SMSBOTU SaaS product that brings internet access via SMS for the people who don't have reliable internet connection but still in the GSM coverage. Currently 300+ users and monthly 20 beta testers. (Langchain, OpenAl API, Fastapi, GCP Cloud Run, Firebase, Nextjs, Tailwind)
- Competed in <u>5 different Kaggle Competitions</u> (details can be found in my portfolio). (Numpy, Pandas, Sklearn, XgBoost, LightGBM, Keras, Torch, Tensorflow Matplotlib, Seaborn)
- Academic Article Classification (NLP Project) (Tensorflow, Fasttext, Bert, Bart, Glove, Transformers, Huggingface)
- Pandemic Simulation with Deep Reinforcement Learning. Training agents in a real-time pandemic outbreak to measure the success rate of survival strategies by using RL techniques. Showcased in Unity's Webpage.

(TF-Agents, Gym, TensorFlow, AWS EC2, Unity)

♣ A Vibrotactile Hand Interface for VR was the final year awarded as the Best Engineering Project Class of 2018-2019 Award. It was presented in the biggest VR event of Europe VRDays Exhibition in Amsterdam afterwards. (Computer Vision, Hand-Tracking, Arduino, C, 3D printing, Hardware Design)

Work Eligibility: Eligible to work in the UK and Turkey.