CEM BERKE ARSLAN

Email:bscemarslan@gmail.com

PERSONAL DATA

Linkedin: https://www.linkedin.com/in/cem-arslan-b4b46317b/

Github: https://github.com/Darkosxl Citizenship: Romania, Turkey

EDUCATION

Bocconi University

Bachelor in BAI - Mathematical and computing sciences for artificial intelligence - BSc studying with a full ride Italian Government Scholarship ISU, currently in the last year

Milan, Italy

September 2021 - July 2024

Istanbul American Robert High School

High school - First American School founded outside of the US in 1863, is one of the most selective independent private high schools in Turkey

Istanbul, Turkey September 2016 - June 2021

WORK EXPERIENCE

Toyota Motor Europe

Virtual Scenario Development Engineer Intern

Brussels, Belgium August 2024 - January 2025

- Defined project scope according to a general request for open-source adaptation of the current virtual scenario environment
- Developed a virtual environment suitable for rapid vehicle testing and analysis using Unreal Engine 5
- Implemented multiple custom scenarios using CarMaker, CarSim
- Reimplemented the scenarios with active traffic and dynamic ego vehicle using OpenX standards with Unreal Engine 5, Simulink and esmini.
- Analysed dynamic and static performance of current paid-solution versus my open-source and presented to the head of vehicle performance

Amazon EU Sarl

Business Intelligence Intern

Luxembourg City, Luxembourg

July 2023 - January 2024

- Created from scratch a data deck that incorporates all EU FBA Speed (1 Day, 2 Day) elements in 10 marketplaces and is used in region wide business reviews.
- Contributed to development of projects involving data mining, automation, optimization, scalability, and security
- Created solutions to run predictions on distributed systems using Amazon Web Services (AWS)
- Built distributed storage, index and query systems that are scalable, fault-tolerant, low cost and easy to use
- Worked using agile development principles to deliver high quality software for conversion between SQL dialects (MySQL, Spark SQL, Amazon Redshift)

CMV Teknoloji

Istanbul, Turkey

Software Development Intern

June 2022 - August 2022

- Developed using MySQL technical skills for management of large databases of BIM & Migros (Market Chains)
- Helped Java Spring development for an interface for the complex data of these large databases.
- Participated business meetings which entailed the development of products, websites and the delivery of database services.

PROJECTS

Vertical AI Content Creationg and Analysis Startup Tech Cofounder Milan, Italy

February 2025 - Current

• Serving Agile solutions with data driven plans to content creators.

Bachelor's Thesis: Recreation of 3D vehicle models from 2D views/text prompts using Reinforcement

Milan, Italy

Learning Enhanced Neural Radiance Fields

February 2024 - Current

- Under the Advisory of Professor Andrea Tangherloni, researching and implementing techniques for text-to-3D and text-to-2D into 2D-to-3D using Neural Radiance Fields
- Experimenting on an MLP (DreamFusion inspired) with OpenCV to transform 2D car images to 3D assets
- Utilising PyTorch to create simple neural radiance fields for 2D image synthesis into 3D
- Developing another model using Gaussian splatting for higher quality 3D object synthesis from images

Cancer Cell Genome Analysis

Milan, Italy

March 2023 - May 2023

- Developed a reinforcement learning model that labels differences between cancerous cell genome and normal cell genome
- Performing Differential Expression Analysis, Enrichment Analysis, PCA & Density Sparsity Analysis

SKILLS

- Languages: Turkish (Native), English (Fluent), Italian (Intermediate), Romanian (Intermediate), German (Beginner), French (Beginner)
- Technical Skills: Java, Pandas, PyTorch, Python, MySQL, PostgreSQL, Spark SQL, Git, C#, LaTeX, Spring (Java)