europass

Cansu Tunc

WORK EXPERIENCE

SOFTWARE ENGINEER/RESEARCHER – CTLUP – 01/09/2024 – Current – ROME, ITALY

PANDORAS:
- Led systematic review of 200+ state-of-the-art papers on Digital Twins, AI logistics, and IoT, defining 15 KPIs and 20+ data flow requirements
- Prototyped deep learning models in PyTorch for travel-time and risk estimation to support route planning

In the **Micro-Mobility Integration App (MIMA)** project:
- Designed a scalable backend system with integrated spatial data visualization tools for micro-mobility safety, focusing on incident reporting, self-reporting, and generating heat maps for risk visualization.
- Used machine learning techniques to analyze crowd-sourced data and self-reported information, which included tools for real-time, safe routing based on high-risk area detection.
- Integrated a self-reporting feature allowing users to provide feedback on safety, which contributes to dynamically updated risk assessments and notifications for user safety.
- Implemented real-time routing recommendations using machine learning algorithms and triggered through API Gateway.

Other projects, including **Attention-Based Vehicle Trajectory Prediction**:
- Developed LSTM and multi-head attention models to improve vehicle trajectory predictions by accounting for social contexts and vehicle interactions, enhancing the model's adaptability in various traffic scenarios.

GAME DESIGNER – GIANT AVOCADO GAMES – 01/09/2021 – 09/05/2022 – ISTANBUL, TÜRKIYE

Endless Colonies (game)
Developed, tested and maintained mini in-game applications using C# and Unity
Implemented data collection pipelines to gather gameplay analytics data to be utilized by data science and marketing teams for decision-making processes
Provided evidence-based recommendations derived from gameplay data using cutting edge methods
Optimized game dynamics using python-based simulations

SOFTWARE ENGINEER, INTERN – ELDOR CORPORATION – 03/08/2019 – 11/09/2019 – IZMIR, TÜRKIYE

Development of an image processing pipeline using Lidar-based data for preventing defects on a production pipeline.
Main goal was analyzing placement and proximity errors of parts located on a conveyor belt
Utilized mainly Python and OpenCV
Prevented errors that could damage expensive items and urged workers to manually intervene with the belt
Deployed analytics data processing tasks via AWS Lambda for efficient serverless scalability.

EDUCATION AND TRAINING

10/10/2022 – 25/10/2025 Rome, Italy
MASTER OF SCIENCE IN ENGINEERING IN COMPUTER SCIENCE Sapienza University of Roma

13/09/2016 – 10/06/2022 Izmir, Türkiye
BACHELOR OF SCIENCE IN MECHATRONICS ENGINEERING Izmir Katip Celebi University

LANGUAGE SKILLS

Mother tongue(s): **TURKISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
ITALIAN	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

SQL | MySQL | data science | python | software development | php | artificial intelligence | Python | data analytics | Docker | machine learning | Git | computer vision | deep learning | Backend Development: Python (Django) | AWS - Lambda | ETL mechanisms | Natural language Processing | Cloud Technologies (Azure, Google)