Onur YILMAZ

Munich, Germany
Email: business.onuryilmaz@gmail.com
Linkedin: linkedin.com/in/onur-yilmaz-
Github: github.com/OnurYilmazGit

Objective

Motivated Master's student in Informatics at the Technical University of Munich with a strong foundation in C++, parallel programming, and numerical optimization. I am eager to contribute to NVIDIA's cuOpt engineering team by leveraging my experience in scalable software design, performance tuning, and algorithms. My passion for solving complex optimization problems and interest in accelerated computing make me excited to be part of a team driving the next generation of innovation in decision-making systems.

EDUCATION

Technical University of Munich — Munich, Germany
M. Sc. Informatics - — April 2022 - October 2024

- **Master Thesis:** Developed an entropy-based Random Forest compression method for high-dimensional time-series data in HPC environments, achieving up to **125× data reduction** with **97% accuracy**. Enhanced computational efficiency and storage management for machine learning models. x

Özyeğin University — Istanbul, Turkey
Bachelor of Computer Science - Honor Degree — September 2015 - July 2021

WORK EXPERIENCE

Giantswarm Company — Munich, Germany (Remote)
Cloud Native Working Student — November 2023 – August 2024

- Spearheaded critical package updates and dependency management for Kubernetes environments, improving security and streamlining workflows.
- Managed and scaled customer clusters using Microsoft Azure, maximizing resource efficiency and ensuring compliance by developing cluster policies with Go and Kubernetes.
- Diagnosed and fixed failed nodes in Kubernetes clusters, enhancing infrastructure stability and performance.

Intel Corporation — Munich, Germany
Infrastructure and DevOps Intern — May 2022 – October 2023

- Developed an automated infrastructure and test suite system, reducing manual monitoring efforts by **98%** and decreasing test result retrieval time from **1 hour to 5 minutes**, benefiting a team of 50+ developers.
- Created comprehensive Grafana dashboards integrated with Jenkins and InfluxDB, improving decision-making with dynamic visualizations.
- Engineered Python scripts to automate data collection and processing from Jenkins, transforming raw data into structured formats.
- Deployed dashboards in a production environment using Docker Swarm, ensuring scalability and reliability.

PROJECTS

Stock Price Prediction and Trading Signal System — June 2024

- Developed a data-driven system to support investment decisions and mitigate risks.
- Built an Python-based ETL pipeline using AWS Lambda and Glue to gather and process real-time stock and cryptocurrency data.
- Applied DeepAR+ machine learning models with Amazon Forecast, incorporating technical indicators like RSI and MACD to enhance prediction accuracy.
- Designed a signal generation module that issues buy, sell, or hold recommendations based on forecasted trends.
- Utilized Amazon DynamoDB for scalable and high-performance data storage and integrated Slack API for real-time notifications.
- Optimized investment strategies by delivering accurate predictive analytics and actionable trading signals, effectively minimizing financial risks.

Rare Car Collection Recommendation System February 2024

- **Engineered and fine-tuned Meta's LLama LLM** using PyTorch to deliver personalized car recommendations based on user preferences and historical interaction data.
- **Developed a robust Python ETL pipeline** with Scrapy and BeautifulSoup for data extraction, cleaning, and aggregation from specialized sources such as ClassicCars.com and Barrett-Jackson.
- **Implemented ClickHouse for high-performance vector storage** to enable efficient similarity searches and integrated FastAPI to build scalable RESTful APIs for real-time recommendation delivery.
- **Deployed and managed the system using cloud-native services**, integrated LangChain for advanced NLP-driven conversational agents, and utilized Slack API for real-time user notifications and interactions.

TECHNICAL SKILLS & CERTIFICATIONS

- **Programming Languages:** Python, C++, Java; Familiar with Go, JavaScript, React Native
- **Cloud Platforms:** AWS, Microsoft Azure
- **Embedded Systems:** Embedded Linux, BSPs, Microservice Architectures, Application Security
- **DevOps & Automation:** Jenkins, Grafana, Docker, Ansible, Kubernetes, CI/CD, Git/GitHub
- **Databases & Monitoring:** InfluxDB, MySQL, AWS Redshift, DynamoDB
- **Machine Learning & AI:** TensorFlow, OpenCV, YOLO, Deep Learning, NLP
- **Operating Systems:** Unix based systems, Windows
- **Automation & Scripting :** Automation, Debugging, Test-Driven Development, Virtualization
- **Certifications:** **AWS Certified Cloud Practitioner** (Earned: January 2022)

SOFT SKILLS

- Adaptable and proactive professional with strong problem-solving abilities and a rapid learning curve. Proven expertise in designing and evaluating AI-driven solutions in high-pressure environments. Excellent communicator, adept at presenting complex AI projects to stakeholders and facilitating cross-departmental collaboration. Effective team player, consistently delivering high-quality results and driving innovation within teams. Skilled in translating complex analytical findings into actionable business recommendations for diverse stakeholders.

LANGUAGES

- Fluent in English and Turkish | Conversational German (A2, improving proficiency).

EXTRACURRICULAR ACTIVITIES

Jazz Drumming January 2016 – Present

- Dedicated 7 years to mastering jazz drumming. Organized and led band gatherings, composed original music collaboratively, and built strong relationships among band members to create a vibrant and cohesive musical community.