İrem Naz Çelen

+971 56 534 83 25 · iremnaz.celen@nyu.edu · linkedin.com/in/irem-naz · github.com/irem-naz

Education

New York University, Abu Dhabi, UAE, GPA 3.8/4

July 2025

B.Sc in Computer Engineering, minor in Interactive Media

Relevant Classes: Computer Architecture, Graduate-level Machine Learning, Embedded Systems, Software Engineering

Work Experience

Data Analyst Intern

startAD - Case Study · Infographic

March 2025 - July 2025

- Analyzed 33+ Qualtrics survey responses and 5+ interviews, producing data visualizations and a 12-page insights report, informed and contributed to program design, ideation, and KPIs for NYUAD Entrepreneurship School.
- Automated program evaluation by building a pipeline linking 20+ post-program reports to an AI-powered analysis notebook, customGPT and custom-built interactive data dashboard (Python, Matplotlib, Pandas, Vercel).

Capstone Researcher

Multimedia and Visual Computing Lab at NYUAD - Poster

September 2024 - May 2025

- Compared Embodied AI approaches for zero-shot navigation in the RoboTHOR simulation environment, leveraging SLAM with LLM-driven (openai-o3) and probability-matrix-driven reasoning to locate objects in new locations.
- Presented research at Capstone Festival to 100+ people, under the guidance of Yi Fang, PhD.

Research Assistant

Modern Microprocessor Architectures (MoMA) Lab at NYUAD – Repo

May 2024 - August 2024

- Conducted literature review on the topics of Mutli-GPU usage across 50+ papers and devised methodology.
- Utilized kernel profiling with Nvidia's Nsight Compute and Nsight Systems to analyze GPU-enabled Machine Learning algorithms such as Logistic Regression and K-Nearest Neighbour.
- Optimized and compared methods for Multi-GPU programming using CuPy, CUDA and their hybrid versions, against cuML across varied memory usage, GPU count (1, 2, 4 and 8), data size, all recorded at GitHub repository.

Teaching Assistant

Computer Programming for Engineers (ENGR-UH 1000)

January 2023 - December 2024

• Supervised 55+ students for 3 hours programming labs, graded quizzes, mentored projects and held office hours.

Projects

GourmetGram Deployment Practices - Slide Deck · Jupyter Notebook

Fine-tuned Keras CNN base models for food photo classification, balancing accuracy and real-time inference latency, and designed deployment strategies with operational metrics.

Tech: TensorFlow, Keras, Python, Google Colab, Chameleon Cloud deployment, Kubernetes, Model optimization

MedBox Genie iOS Medicine Management App – Demo · Repo

Tech: Swift, Figma (UI/UX design), Firebase NoSQL Cloud Database, Use-case & flow diagrams, Deployment strategy

Interactive Webpage Development – Interactive Audio-scape · Interactive Comic · Interactive Video-scape Tech: HTML/CSS/JavaScript, DaVinci Video Editor, Dall-e, Blackmagic, Audacity, Canva, Illustrator, Photoshop

Creative Tech Performances Ruins of 2023 // Timespirits - Portfolio Deck

Tech: Stable Diffusion (Fine-tuning), Lumalabs.ai Genie, Runway ML, Sora, Unity, LiDAR mapping, Pulsar, Arduino

Leadership & Community Involvement

Engineering IDBEA Committee Member

November 2024 - May 2025

• Organized events and facilitated dialogue around Belonging and Inclusion for 200+ Engineering Division members.

Facilitator

Office of Spiritual Life, Intercultural Education, and Conflict Transformation at NYUAD May 2023 - May 2025

• Facilitated an inclusive space for a diverse group of 50+ students across 8 weeks under group transformation format on topics such as belonging, community, conflict styles, power and privilege for 4 separate academic semesters.