Gaukhar Nurbek

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Education

University of Texas RGV May, 2028
PhD Physics *Edinburg, TX*

University of Texas RGV May, 2024
MS Computer Science, GPA: 4.0/4.0 *Edinburg, TX*

University of Texas RGV May, 2021
MS in Interdisciplinary Studies in Science and Technology, GPA: 3.93/4.0 *Brownsville, TX*

Kazakh-British Technical University May, 2018
BEng Information Systems, GPA: 3.5/4.0 *Almaty, Kazakhstan*

Experience

University of Texas RGV Edinburg, TX
Graduate Research Assistant *Aug 2023 – May 2024*

- Developed and implemented advanced reinforcement learning policies for a 3D simulation locomotion model. Utilized **Temporal Graph Neural Networks** and various tools including **Python, PyTorch, PyTorch Geometric, PyTorch Geometric Temporal, MuJoCo, and Tensorboard**.
- Assisted in teaching courses on Deep Learning, Reinforcement Learning, and Object-Oriented Programming, providing support and guidance to over 80 students.

Uber Sunnyvale, CA
Software Engineering Intern *May 2023 – Aug 2023*

- Developed a key feature for an internal tool serving 10-15k weekly users using **Go** and **TypeScript**.
- Improved user experience by delivering features on schedule and implementing comprehensive unit tests in **Go**.
- Actively participated in the design, coding, testing, and deployment phases of the feature.

University of Texas RGV Edinburg, TX
Graduate Teaching Assistant *Aug 2022 – May 2023*

- Automated 90% of grading for a Computer Science I course using **Python** and **Bash**.

Staff Research Assistant *July 2021 – July 2022*

- Improved signal detection algorithm by 5% and conducted gravitational waves data analysis using **MATLAB, C++, Python, and Bash**, supported by NSF grant.

Graduate Research Assistant *August 2019 – May 2021*

- Enhanced data analysis pipeline by utilizing deep learning algorithms for image classification and signal processing using **MATLAB, Python and Bash**.

Kazdream Technologies Astana, Kazakhstan
Data scientist *May 2019 – August 2019*

- Trained a deep learning model to convert human speech to text, processing 200k audio data samples using **Python, Pandas, NumPy, wav2letter, Docker and CUDA**.

Center for Sustainable Capital Development Astana, Kazakhstan
Data analyst *August 2018 – February 2019*

- Built a time series regression model using **Python** and integrated it into a web application with **Flask, HTML/CSS/Bootstrap, and JavaScript**.
- Developed a web crawler and processed 1 million rows of data using **Python, Selenium, Beautiful Soup, and SQL**.

Projects

ML Interview Prep Tutor *June 2024*

- Developed a web-based chat application for Machine Learning theory interview preparation. The system utilizes a customized knowledge base and is built using **Python, Django, HTML, JavaScript, Langchain, and the OpenAI API**.

Expert System's Chat Bot *January 2024*

- Implemented a pipeline to vectorize and embed user-specific data into chatbot responses in Kazakh and Russian using **Python, Langchain, OpenAI API and Chroma**.

Technical Skills

Languages: Python (Pandas, NumPy, Matplotlib, Seaborn, Selenium, Beautiful Soup), Bash, MATLAB, Go, C++, SQL, TypeScript, HTML, CSS.
Developer Tools: Django, Jupyter Notebook, Git, Docker, Flask, VS Code.
Technologies/Frameworks: PyTorch, PyTorch Geometric, PyTorch Geometric Temporal, Langchain, wav2letter, CUDA, OpenAI API, Chroma, MuJoCo, Tensorboard.