

Gaukhar Nurbek

gaukharanurbek@gmail.com | github.com/vbncml

EDUCATION

University of Texas RGV

MS Computer Science (GPA: 4.0/4.0)

May, 2024

Edinburg, TX

- Relevant coursework: Computer Theory, Design and Analysis of Algorithms, Deep Learning, Data Science

University of Texas RGV

MS in Interdisciplinary Studies in Science and Technology (GPA: 3.93/4.0)

May, 2021

Brownsville, TX

- Relevant coursework: Data Analytics, Foundations of Software Development, Statistical Methods
- Awards: Presidential Graduate Research Assistantship award, 2019-2021, 1st place for the best oral presentation, UTRGV College of Science Conference, 2020

Kazakh-British Technical University

BEng Information Systems (GPA: 3.5/4.0)

May, 2018

Almaty, Kazakhstan

- Relevant coursework: Algorithms and Data Structures, Object-Oriented Programming and Design, Database Design and Administration, Foundations of Web Programming, Data Science and Machine Learning
- ABET accredited program

EXPERIENCE

University of Texas RGV

Graduate Teaching Assistant

Edinburg, TX

Aug 2023 – May 2024

- Worked on implementing **Reinforcement Learning** policies for **3-D locomotion model** using **Graph Neural Networks** utilizing **python**.
- Contributed to the instruction of courses on Deep Learning, Reinforcement Learning, and Object-Oriented Programming by providing support and assistance to over 80 students

Uber

Software Engineering Intern

Sunnyvale, CA

May 2023 – Aug 2023

- Developed a key feature for an internal tool used by 10-15k weekly users, utilizing **Go** and **TypeScript**. Successfully delivered the feature on time and contributed to enhancing user experience.
- Implemented thorough unit tests using **Go** to ensure the reliability and robustness of the codebase.
- Collaborated closely with the team to design, code, test, and deploy the feature.

University of Texas RGV

Graduate Teaching Assistant

Edinburg, TX

Aug 2022 – May 2023

- Automated 90% of grading for CSCI I course by utilizing **python** and **bash**.

Staff Research Assistant

July 2021 – July 2022

- Improved signal detection algorithm by 5%. Performed gravitational waves **data analysis** using **matlab**, **C++**, **python** and **bash**. Supported by NSF grant.

Graduate Research Assistant

August 2019 – May 2021

- Improved the existing **data analysis pipeline** by utilizing **deep learning algorithms** for **image classification** and using **signal processing**, **matlab**, **python** and **bash**.

Kazdream Technologies

Data scientist

Astana, Kazakhstan

May 2019 – August 2019

- Trained **deep learning model** to convert human speech into text, cleaned and pre-processed 200k of audio data for training using **python**, **pandas**, **numpy** **wav2letter** and **CUDA**.

Center for Sustainable Capital Development

Data analyst

Astana, Kazakhstan

August 2018 – February 2019

- Built a **time series regression model** using **python** and **embedded** the model in a **web app** using **Flask**, **HTML/CSS/Bootstrap/JavaScript**
- Created web crawler, cleaned and structured 1 million rows of data using **python**, **selenium**, **beautiful soup**, **SQL**.

CAAIC

Intern iOS developer

Astana, Kazakhstan

January 2018 – February 2018

- Developed an **iOS app** using **Swift/GraphQL API client**

Inessoft

Intern web developer

Astana, Kazakhstan

May 2017 – July 2017

- Created 24 **database references** and **entity data models** with **CRUD** functions, developed login page functionality and implemented tracking user's activity using **C#/.Net MVC/Entity/SQL**

Intern web developer

June 2016 – July 2016

- Implemented tax calculation function and landing page for an existing **iOS app** using **Objective-C**

PROJECTS

GNN-RL

August 2023 – May 2024

- Developed an experimentation software for testing reinforcement learning algorithms employing **graph neural networks (GNNs)** as policies for **locomotion** of **3-D models**. Using **python, PyTorch, PyTorch Geometric, PyTorch Geometric Temporal, MuJoCo, Tensorboard**.

Expert System's Chat Bot

August 2023 – Jan 2024

- Implemented a pipeline to vectorize and embed user-specific data into the chatbot's responses in 2 languages (Russian and Kazakh) using **python, langchain, chroma** .

TECHNICAL SKILLS

Languages: Go, Python(Pandas, NumPy, Matplotlib, Seaborn, Selenium, Beautiful soup), Bash, Matlab, C#, C++, SQL, TypeScript, HTML

Developer Tools and Frameworks: PyTorch, PyTorch Geometric, PyTorch Geometric Temporal, Langchain, Jupyter Notebook, Git, Docker, wav2letter, CUDA