

RUMANA AKTHER

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OFFICE ADDRESS

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EDUCATION

Texas A&M University-Commerce <i>MS in Mathematics - CGPA - 4.00/4.00 till third semester</i>	<i>08/2023 - May 2025(Expected)</i> Commerce, TX, United States
National University, BANGLADESH <i>BS in Mathematics - CGPA - 3.79/4.00</i>	<i>09/ 2016 - 05/ 2022</i> Dhaka, Bangladesh

TECHNICAL SKILLS

Languages: Python, SQL, SAS, Mathematica, Julia, FORTRAN, HTML, Java, C, C++, Dart, JavaScript, Go

Developer Tools: VS Code, ChatGPT, Latex, Excel, PowerPoint, MATLAB, Adobe Photoshop, Adobe Illustrator, Android Studio, DataGrip.

Technologies/Frameworks:Linux, GitHub, ReactJS, Redux, NextJS, NodeJS, ExpressJS, Git, Mongo, Flutter

RESEARCH & PROJECTS

Usefulness of the Vector Field Singular Points Shapes for Classification. *Spring 2024*
Texas A&M University-Commerce, Department of Mathematics.
Advisor: Dr. Nikolay M. Sirakov

- Used Gradient method, Laplace operators and, different kind of Vector fields.
- Used ELPAC software for image segmentation.

Principal Component Analysis For Training Data Distillation And Augmentation. *Fall 2023*
Texas A&M University-Commerce, Department of Mathematics.
Advisor: Dr. Nikolay M. Sirakov

- Used principal component analysis to distill and augment medical data.
- Used four classifiers (Neural Network, Logistic Regression, Support Vector Machine -Linear Kernel and Support Vector Machine -Polynomial Kernel) to measure the quality of the model.

WORK EXPERIENCE

Graduate Assistant-Teaching

September 2023 - Present

Texas A&M University-Commerce, Department of Mathematics.

Teacher of Record

- Foundations of Mathematics for Non-STEM (MATH-120)
*Prepared & presented lectures with standardized course materials.
Assessed students' learning on regular basis & graded tests and finals with clear feedback.*
- Recitation for Calculus III (MATH 2415)
*Recited the study materials and presented homework solutions every week.
Instructor: Dr. Yelin Ou*
- Recitation for Calculus III (MATH 2415)
*Recited the study materials, presented homework solutions and made quizzes every week.
Instructor: Dr. Aditi Ghosh*

Academic testing centre.

Did proctoring in Academic testing centre for department of mathematics

Assistant Teacher, Mathematics

June 2022 - August 2023

Juri Model Academy, Moulvibazar, Bangladesh.

- Enhanced student understanding by using various teaching methods tailored to individual learning styles.
- Increased retention rates through engaging and well-structured lessons that addressed diverse learning needs.
- Streamlined grading process, providing timely feedback on assignments and assessments to improve student outcomes.
- Developed strong rapport with students and parents, facilitating open communication and fostering a supportive learning environment.

AWARDS & SCHOLARSHIPS

Bill, Gloria & James Aslan Graduate Student Endowment Scholarship.

Fall 2024

Mathematics graduate student scholarship.

Graduate School scholarship.

Fall 2024

Texas A&M University-Commerce.

Rachel Lafferty Mathematics Endowment Scholarship

Fall 2023

Mathematics graduate student scholarship.

EXTRA-CURRICULAR ACTIVITIES

- Former Member of Dhruvok Club, Dept. of Mathematics, MC College, Sylhet, Bangladesh.
- Participant in Online and offline Math Quiz Competitions organized by various organizations.
- Organised and implemented lots of events.