NISHAT TASNIM

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https://scholar.google.com/citations?user=7ousrlIAAAAJ&hl=en&oi=sra
https://nishattasnim5709.gitbook.io/python/

SKILLS

- **Statistical Concepts:** Regression, Probabilities, Time Series Analysis, and Applied statistics
- **Machine Learning:** Logistic Regression, Random Forest, Decision Trees, Isolation Forest, Gradient Descent, Support Vector Machine, Principal Component Analysis, Convolutional Neural Network
- **Stochastic Models:** Stochastic Process, Stochastic Volatility, Stochastic Differential Equation, Fast Fourier Transform.
- **Programming & Scripting Languages:** Python, R, C, JavaScript, Linux Shell Scripting
- **Frameworks & Libraries:** TensorFlow, Scikit-Learn, Keras, Matplotlib, Pandas, OpenCV, NLTK, PySpark
- **Platforms:** Google Colab, AWS SageMaker, Tableau, IBM Cloud, Arduino, Heroku
- **Database:** SQL
- **Version Control System**: Git

WORK EXPERIENCE

MS Teaching Assistant, MATH 1530 - Elements of Statistics Clarksville, TN
Austin Peay State University *October 2021 – Present*

- Assisted 30+ students during in-class exercises and homework assistance during in-office hours.
- Provided assistance to equip students with a firm foundational understanding of basic to mid-level statistics concepts and methodologies. Topics included basic probability models, combinations, random variables, discrete and continuous probability distributions, statistical estimation and testing, confidence intervals, and an introduction to linear regression.
- Assisted the professor by managing assistance records, grading homework, and proctoring students' exams.

MS Research Assistant Clarksville, TN
Austin Peay State University *October 2021 – Present*

- Experienced with high-dimensional and high-frequency data analysis.
- Collaborated with a group of scholars.
- Published high-quality peer-reviewed journal papers.
- Presented interaction visualization results in the national/international conferences.

SIGMIND Dhaka, Bangladesh
Deep Learning Engineer (Intern) *February 2021 – July 2021*
Masked Face Detection and Recognition

- Developed a Deep Learning model to automatically detect people wearing masks from the real-time video feed.
- Developed a Web Application to register faces in a database that readily recognizes the face and reveals the identity.

EDUCATION

Austin Peay State University Expected Graduation: May 2023
Master of Science in Computer Science and Quantitative Methods *GPA: 4.0/4.0*
Relevant Coursework: *Probabilistic and Statistical Reasoning, Regression Analysis, Differential Equation and Stochastic Analysis*

Daffodil International University Awarded: June 2019
Bachelor of Science in Computer Science and Engineering *GPA: 3.7/4.0*
Relevant Coursework: *Object-Oriented Programming, Database Management System, Artificial Intelligence, Digital Image Processing, Data Mining, Introduction to Bio-Informatics,*

ACHIEVEMENTS

- Applied Data Science Module (Unit I & II) Certificate- WorldQuant University, USA *July 2020 - December 2020*
- AI Professional Training Program - ICT Division of Bangladesh *May 2020 - August 2020*
  Top Performer among 30 trainees
- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning - Coursera *March 2020*

RELEVANT PROJECTS

- **Building A Chatbot Application**
  - *Developed a chatbot using MS SharePoint with Python and ML embedded application.* *December 2021*
- **Volatility Estimation of COVID-19 Daily Rates** *July 2021*
  - *Applied Stochastic Volatility Model with Kalman Filtering Technique*
- **Bengali.AI Handwritten Grapheme Classification (Kaggle Competition)** *June 2021*
  - *Analyzed 13,000 different graphemes of Bengali alphabets with 200840 training dataset (parquet image files)*
  - *Applied Convolutional Neural Network with Keras and TensorFlow*
  - *Implemented a number of serial non-linear layers as encoders as well as a corresponding set of decoders that work as pixel-wise classifiers*
  - *Enhanced the performance and accuracy by various algorithms like "data augmentation", "resizing", "dropout"*
- **Parkinson's Syndrome Prediction** *January 2021*
  - *Developed Supervised Models and analyzed data to obtain important features, devised data using train_test_split, evaluated R^2 to calculate the coefficient of determination*
  - *Demonstrated Bias-Variance tradeoff, performed GridSearchCV to optimize model, cross-validated using K-fold*
  - *Deployed the model on Heroku*

MEMBERSHIP

- National Society of Black Engineers *Present*
- Society of Women Engineers *Present*
- Data Science Association *Present*