MD SOMIR KHAN

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[LinkedIn](#) | [Github](#) | [Portfolio](#)

OVERVIEW

A Ph.D. student in Computer Science at the University of Louisiana at Lafayette with academic research experience in **AI/ML, Data Analysis, and NLP** and 3 years of experience in the software industry as a **Full Stack Engineer**. Key qualities include the ability to work independently, curiosity to learn new things and great oral and written communication skills.

TECHNICAL SKILLS

Languages: Python, C++, C, Java, SQL, HTML, CSS, JavaScript.

Frameworks: TensorFlow, Keras, Scikit-learn, OpenCV, Pandas, NumPy, Matplotlib, seaborn, PyTorch, Git, Laravel, Vue.js, Nginx, AWS EC2, AWS S3.

EDUCATION

University of Louisiana at Lafayette — Lafayette, LA, United States
Doctor of Philosophy in Computer Science — *Aug 2025 - Present*
GPA: **3.91/4.00**
- **Research Area:** *Trustworthy AI, Foundation Models, Medical Imaging*

University of Louisiana at Lafayette — Lafayette, LA, United States
Master of Science in Computer Science — *Jan 2023 - May 2025*
GPA: **3.91/4.00**
- **Thesis:** *Curbing the Ramifications of Authorship Abuse in Science*
- **Key Courses:** *Design & Analysis of Algorithms, Neural Networks, Image Processing, IT and Network Security, Principles of Computer Communication and Networks*

Khulna University of Engineering & Technology — Khulna, Bangladesh
Bachelor of Science in Computer Science and Engineering — *March 2016 – March 2020*
GPA: **3.22/4.00**
- **Undergrad Thesis:** *Sentiment Analysis for Bengali Sentences using CNN-BiLSTM model*
- **Key Courses:** *Algorithm Analysis and Design, Data Structures and Algorithms, Object Oriented Programming, Operating Systems, Database Systems, Machine Learning, Artificial Intelligence, Discrete Mathematics, Mathematical Analysis, Numerical Methods, Software Engineering and Information System, Computer and Network Security*

PUBLICATIONS

- **Md Somir Khan**, Mehmet Engin Tozal, "Curbing the Ramifications of Authorship Abuse in Science", **Under Review**, 2025

- Md. Main Oddin Chisty, Abu Noman Md Sakib, **Md Somir Khan**, Md. Badiuzzaman Shuvo, "Prompt Injection Detection Using Ensemble of BERT and LSTM with GloVe Embeddings", *International Conference on Electrical and Computer Engineering (ICECE)*, **Accepted**, November, 2024

RESEARCH PROJECTS

Curbing the Ramifications of Authorship Abuse in Science — *Python, R, Pandas, Matplotlib, Selenium*
MS Thesis
- Created a bibliometric dataset by collecting data from Google Scholar.
- Analyzing authorship trend and investigating ways for mitigating Authorship abuse.

Application of Machine Learning on Selection of CPU scheduling dynamically — *Python, Scikit-learn, Pandas, Numpy*
MS Course Project
- Compared application of different machine learning classifiers like LDA, Decision Tree, Random Forrest to dynamically choose appropriate CPU scheduling technique to reduce operation time.

Diagnosing Parkinson's Disease Using 1D CNN with DWT Coefficients — *Python, Keras, Pandas, Numpy, MATLAB*
MS Course Project
- Conducted an investigation into the potential use of Discrete Wavelet Transform (DWT) and Convolutional Neural Network (CNN) for the diagnosis of Parkinson's Disease (PD) based on gait data.
- Utilized publicly available gait data sets to test the proposed method and evaluated its performance.

Sentiment Analysis on Bengali Sentences using CNN-BiLSTM Model — *Python, NLP, NumPy, Pandas, TensorFlow, Git*
Undergrad Thesis
- Created a dataset of bengali sentences by collecting data from Youtube and former Twitter platform.
- Designed a model with Convolutional Neural Network with Bidrectional LSTM for analyzing positive and negative sentiment.

OTHER PROJECTS

Hand Gesture Controlled Wheel Chair   *Raspberry Pi, Python, Arduino Uno*
Undergrad Course Project
- Developed a prototype vehicle with hand gesture control using a Raspberry Pi, Arduino Uno, and an Accelerometer to assist individuals with mobility challenges.

STANDARDIZED TEST SCORES

GRE   Nov 08 2021
306 (Quantitative - 153, Verbal - 153, AWA – 3.0)

PROFESSIONAL EXPERIENCE

Graduate Teaching Assistant at the School of Computing & Informatics   Lafayette, LA, United States
University of Louisiana at Lafayette   *Jan 2023 - Present*
- Course: Introduction to Data Structures & Software Design
  - * Assisted course instructor in preparing exam questions and assignments.
  - * Mentored students by one-on-one in person and virtual meetings.
  - * Graded assignments of around 30 student every semester.

Software Engineer   Dhaka, Bangladesh
Nagorik Technologies Ltd   *Nov 2021 – Dec 2022*
- Developed and deployed central payment gateway system for 12 Company products, reducing payment gateway integration time from 16 hours to 1 hour.
- Developed and deployed the backend and admin portal for 10 quiz-based applications, each with over 500,000 users.
- Worked on optimizing complex queries and caching on 6 applications.
- Coordinated communications and technical documentation between the development team and Marketing team.

Software Engineer   Dhaka, Bangladesh
Mazegeek Technologies Ltd   *Aug 2020 – Oct 2021*
- Developed and deployed SaaS platform to integrate chatbots for order management and customer support on Facebook and Viber.
- Developed and deployed web application for SMS campaigns on mobile operator networks and Viber.
- Contributed to the development of an E-kyc web application focused on the extraction of information from National ID cards and the verification of individuals by matching their faces with the images on the National ID cards.
- Worked on data visualization for dashboards and reports.

OTHER EXPERIENCE

Information Desk Staff at Student Union   Lafayette, LA, United States
University of Louisiana at Lafayette   *Jun 2023 - Jul 2023*
- Assisted students and visitors with inquiries and provided information about university services.
- Developed strong communication and interpersonal skills through interactions with diverse individuals.

AWARDS AND ACHIEVEMENTS

- Intra KUET Programming Contest 2019 - 7th position
- Intra KUET Programming Contest 2017 - 2nd position
- Higher Secondary Certificate General Scholarship 2015

VOLUNTEERING AND CO-CURRICULAR ACTIVITIES

- Serving as a member of the Bangladeshi Student Association at ULL by organizing Bengali community festivals and helping new Bangladeshi students.
- Served as Vice President and General Secretary of the Cyber Gaming Club for a total of 2 years, where I organized gaming events, managed sponsors, and led event organization from 2016 to 2020 at the Khulna University of Engineering & Technology.
- Served as a member of the Organizing Committee for a Computer Science Festival organized by the Department of Computer Science at Khulna University of Engineering & Technology in 2019.
- Served as a Dream (Voluntary Blood Donation Society of KUET) member, where I donated blood and volunteered to manage blood donation and organize events from 2016 to 2020 at the Khulna University of Engineering & Technology.