A K M Nuhil Mehdy

https://nuhil.net/ | nuhilmehdy@gmail.com | +1(208)-713-6141 | Boise, ID, USA
GitHub: https://github.com/nuhil | LinkedIn:https://www.linkedin.com/in/nuhil/

QUALIFICATIONS SUMMARY

Machine Learning Engineer at Micron Technology with a **Ph.D. in Computing**, and both **B.Sc. and M.Sc.** degrees in computer science. A former software engineer who believes in artificial intelligence and prefers the cloud infrastructure for developing software and machine learning based AI tools, following the micro-service architecture.

SKILLS OVERVIEW

- **Programming** – Python, Javascript, Java, C/C++, SQL, R, PHP, HTML, CSS, Shell, Matlab
- **Data Science** – Statistical Analysis, EDA (Exploratory Data Analysis), Data Visualization, Probability Distributions, Hypothesis and Significance Test, Bayesian Statistics, Streamlit, Pandas Profiling
- **Data Engineering** – ETL (Extract Transform Load), BigQuery, Google Cloud Storage, SQLite, MySQL, SQL Server, PostgreSQL, MongoDB, SQLAlchemy, Cloud SQL, PySpark (Spark, Hadoop), Apache NiFi, Jupyter Notebook, Zeppelin, Amazon EMR (Elastic Map Reduce), Google Dataproc, Google Data Studio, Tableau, Microsoft Power BI
- **Machine Learning** – Linear Regression, Logistic Regression, Support Vector Machine, Decision Tree, Random Forest, Naive Bayes, K-Nearest Neighbors, K-Means, Principal Component Analysis, Ensemble Learning, Numpy, pandas, matplotlib, scikit-learn, Spark MLlib, Google AutoML
- **Deep Learning** – CNN (Convolutional Neural Network), LSTM (Long Short Term Memory Network), Encoder-Decoder Model, Transformer Model (BERT, GPT), GAN (Generative Adversarial Network), NLP (Natural Language Processing), Anomaly Detection, Time Series Forecasting, Recommender Systems, Tensorflow, Keras, Pytorch, Spacy, NLTK
- **MLOps** - git, Docker, Jenkins, GitHub Actions, Amazon Web Services, Google Cloud Platform (Vertex AI, AI Platform, Auto ML, Cloud Composer, BigQuery, Dataproc, Cloud Storage, Cloud Functions, Cloud Pub/Sub, etc.)
- **Software Development** – Django, Flask, FastAPI, Node.js, Express, Agile, Test Driven Development

INDUSTRY EXPERIENCE

Machine Learning Engineer III | MICRON TECHNOLOGY INC. (June 2021 – Present | Boise, ID, USA)
- Building end-to-end, resilient, and production-ready Machine Learning Pipelines for the stakeholders from both the back and front end of the manufacturing processes.
- Combining custom-designed ML models with Google Cloud AutoML and AutoML APIs to enhance the manufacturing processes.

Data Science – Intern | MICRON TECHNOLOGY INC. (May 2020 – August 2020 | Boise, ID, USA)
- Worked on developing machine learning based predictive models that explain and predict hiring outcomes, productivity, engagement, and retention.
- Developed 3 re-usable NLP models that are roughly 12% better in terms of accuracy and interpretability than that of the baselines by utilizing hybrid neural network architecture on top of ~1 million rows of unstructured textual data from in/outside of Micron.

Back End Developer – Remote | MOBBAZAAR INC. (Jan 2015 – Aug 2015 | San Jose, CA, USA)
- Developed backend APIs for Single Tap Communication App for iOS using Slim and Django along with MySQL and PostgreSQL. Later migrated to Tornado for a 50X boost in availability.

Software Engineer | WNEEDS LTD. (Feb 2012 – Jan 2015 | Dhaka, BD)
- Worked on enterprise-level web, mobile, and back-end applications with technologies such as AngularJS, Laravel, Codeigniter, and Objective-C. Successfully worked on enhancing the scalability for up to 3X with technologies such as Apache Solr, NoSQL, and Load Balancing.

EDUCATION AND RESEARCH EXPERIENCE

DOCTOR OF PHILOSOPHY | Computing
Boise State University | Jan 2018 – August 2021 | 3.72/4.00 | Boise, ID, USA
- Investigating Human Privacy Behavior through Descriptive and Predictive Analysis
  - Designing and conducting scientifically grounded better survey techniques for eliciting the human privacy decision-making process and privacy behavior. Employing custom machine learning based approaches to better explain and model the observations.
- Identifying Privacy Disclosures in Natural Language Text
  - Implemented LSTM and Multi-channel Convolutional Neural Network to precisely detect private information disclosures in texts. Utilized underlying linguistic features, word embedding, and sequence learning for sentence-level analysis.
- Anomaly Detection in Time Series Data
  - Developed a Deep Learning based anomaly detection model for identifying real-time anomalies in the time series data. Leveraged generative adversarial network for conducting stealthy attacks on continuous variable processes.

MASTER OF SCIENCE | Computer Science
Lamar University | Aug 2015 – Aug 2017 | 3.64/4.00 | Beaumont, TX, USA
- Deep Neural Network for Autonomous Vehicle Systems (MS Thesis)
  - Implemented Deep Convolutional Neural Network for predicting steering angle in autonomous vehicle systems. Utilized car simulator and augmentation for driving data.

BACHELOR OF SCIENCE | Computer Science and Engineering
Rajshahi University of Engineering and Technology | Rajshahi, Bangladesh
- B.Sc. Thesis - An Internet of Things project by combining technologies such as web protocols, hardware, and interfacing to remotely control electronic devices (2010).

PUBLICATIONS

1. Privacy as a Planned Behavior: Effects of Situational Factors on Privacy Perceptions and Plans. 2021
   1st Author. *ACM UMAP '21 – User Modeling, Adaptation, and Personalization.*
2. Modeling of Personalized Privacy Disclosure Behavior: A Formal Method Approach. 2021
   1st Author. BASS '21. *International Workshop on Behavioral Authentication for System Security @ARES 21*
3. A Multi-Input Multi-Output Transformer based Hybrid Neural Network for Multi-Class Privacy Disclosure Detection. 2021
   1st Author. MLNLP '21. 2nd International Conference on Machine Learning Techniques and NLP.
4. A User-Centric and Sentiment Aware Privacy-Disclosure Detection Framework based on Multi-input Neural Network. 2020
   1st Author. *PrivateNLP '20. Workshop on Privacy in NLP @WSDM 20.*
5. FALCON: Framework for Anomaly Detection in Industrial Control Systems. 2020
   2nd Author. Journal. *MDPI–Multidisciplinary Digital Publishing Institute, Electronics.*
6. Privacy Disclosures Detection in Natural-Language Text through Linguistically-motivated Artificial Neural Network. 2019
   1st Author. SPNCE '19. *International Conference on Security and Privacy in New Computing Environment.*

LEADERSHIP EXPERIENCE

Founder and Main Coordinator | HowToCode.dev**,** Open-source MOOC initiative.
President | Bangladeshi Students Association at Boise State University (2019-2020)
Volunteer Team Lead | 2020 IACRC Elections Conference arranged by Idaho Secretary of State.