

WORK EXPERIENCE

Blend360, MD, USA

Senior Data Scientist

Jul 2023 – Present

Data Scientist

Jan 2022 – Jul 2023

- Developed customer propensity models for a leading timeshare company, facilitating onsite sales agents to target prospective customers.
- Designed and implemented a comprehensive database system to capture and manage information about the client's customers, their transactional history, and the client's targeted marketing efforts.
- Analyzed digital marketing campaigns to gain insights into the long-term performance of product metrics and assessed the influence of offer composition and demographics on campaign effectiveness.
- Conducted customer segmentation analysis to identify the behavior of key market segments and tailor marketing strategies for each to optimize customer engagement.
- Led the enhancement of the in-house modeling library to incorporate advanced boosting algorithms.

Data Analyst | Incept Data Solutions, VA, USA

Nov 2021 – Jan 2022

- Supported data warehouse ETL operations, including data issue identification, cleansing, manual adjustments, and transformation logic.
- Configured Collibra and MySQL servers to automate data reference and management processes.

Research Assistant | Purdue University, IN, USA

Aug 2020 – Aug 2021

- Facilitated the design of novel deep neural networks and achieved state-of-the-art results for biomedical image analysis.
- Led the development of machine learning algorithms to predict soil properties using automated machine learning and time series analysis on remotely sensed data.

Software Engineer | Synchronous, Bangladesh

Mar 2018 – Oct 2018

- Designed and deployed a video broadcast management system for a news network.
- Implemented multiplatform interfacing using React and React Native.
- Identified software incompatibility issues and documented system performance.

EDUCATION

M.S. in Electrical and Computer Engineering

Purdue University, IN, USA

Aug 2019 – Aug 2021

- GPA: 4.0
- Teaching Assistant for Electronic Measurements lab and Signals and Systems lab

B.S. in Electrical and Electronic Engineering

Islamic University of Technology, Bangladesh

Jan 2014 – Nov 2017

SKILLS

Programming Languages and Tools: Python, SQL, R, JavaScript, Git

Cloud Services: AWS (SageMaker, S3, Lambda, EC2, etc.), Snowflake, Databricks

Expertise and Focus: Machine Learning, A/B Testing, Customer Segmentation, Marketing Analytics

SELECTED PUBLICATIONS

- [1] "Estimation of root zone soil moisture from ground and remotely sensed soil information with multisensor data fusion and automated machine learning," *Remote Sensing of Environment*, 2021
- [2] "U-Net and its variants for medical image segmentation: A review of theory and applications," *IEEE Access*, 2021