Md Omer Danish

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Education

Bangladesh University of Engineering and Technology March, 2016 - February, 2021
Bachelors in Computer Science and Engineering

Saidpur Government Science College July, 2013 - December, 2015
Higher Secondary Certificate

Research Interests

Network and Systems Security, Cybersecurity, Big Data, Machine Learning, Deep Learning

Research Work

Design of a Decimal to IEEE-754 Converter using Verilog
Undergraduate Researcher with Professor Dr. Md. Mostofa Akbar

- We can not improve CPU performance to a great extent. But we can get huge facility from task specific chip design. To facilitate the calculation of floating point numbers we have designed a Application-specific integrated circuit. This can convert floating point decimal numbers into single precision IEEE-754 binary number using Verilog by following RTL rules and standard.

Internet availability, adoption and prediction of future demand in Bangladesh
The Bangladesh National ICT Household Survey

- A4AI, a2i, and the Government of Bangladesh have jointly conducted a nationally representative survey to track and identify the extent and type of internet services availed by citizens in both rural and urban areas.

Telecom Customer Churn Rate Prediction using Machine Learning
Techtrioz

- Telecom customer behavior depends on various attributes like age, gender, demography, payment method, monthly charge, contract duration etc. We have implemented a model that can predict whether a customer will churn or not. This will help telecom company to target cutomers more accurately.

Experience

Bigdata Engineer March, 2021 – Present
Techtrioz *Dhaka, Bangladesh*

- **Network Analyzer:** | *Pyspark, MLlib*
  A bigdata system that consumes billions of network data everyday and provides meaningful dashboard for network administrator. It detects any anomaly or intrusion in network traffic using Machine learning.
- **Data Segregation :** | *.Net, C#*
  Implemented a system using .Net framework that process pdf reports and generate desired report.
- **Load Sharing App:**
  Implemented the Android application that will reduce transportation cost by 25%

Certificates

Programming for Everybody | *Coursera*

Python Data Structures | *Coursera*

Neural Networks and Deep Learning | *Coursera*

Structuring Machine Learning Projects | *Coursera*

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization | *Coursera*

Projects

M/M/K queue simulation software | *Python,Tkinter, Matplotlib*

- Developed a python-based project which can simulate different types of M/M/K queue. Simulation parameters can be given from the input field and the result will be shown in graph form as well as value form.
- Used Tkinter for GUI implementation

Smart Fan | *ATmega32, ESP8266 Wifi Module, LM35 Sensor, C++*

- Developed a smart fan system that can sense surrounding temperature and switch on when temperature crosses 30 degree celsius. server plugin to entertain kids during free time for a previous job
- LM 35 Temperature sensor was used to ingest temperature data.
- Data uploaded on "Thing speak server" using ESP8266 wifi module.

Anemia Detector | *Java, Opencv*

- Developed an Android application to detect anemia from the eye image
- Used Opencv library to analyze eye image.

Technical Skills

Languages: C/C++, Python, Java, SQL, Verilog, Assembly 8086, CSS
Libraries: Pyspark, NumPy, Pandas, Matplotlib, Seaborn, Tkinter, OpenCV
Database: MySql, Cassandra, Oracle
Scripting: LaTeX, HTML, CSS, Javascript, bash, shell
IDE: IntelliJ IDEA, NetBeans, Eclipse, Visual Studio, VS Code, Code Blocks, AVR studio, EMU 8086, PyCharm, Navicat
Tools: Wireshark, Cisco Packet Tracer, SEED Ubuntu, Git, Docker, Jira, Bitbucket