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WORK EXPERIENCE (2 years 2 months)

IoT Software Engineer:

Nybbles Systems Limited (NybSys Pvt. Ltd.)

📅 1st Aug 2020 - Present (1 year 9 months)

- Working with IoT team in developing clean code for embedded linux
- R&D on performance improvement for different IoT Gateway products
- Learning sensor data harvesting and protocol mechanisms

IoT Intern:

Nybbles Systems Limited (NybSys Pvt. Ltd.)

📅 1st March 2020 - 31st July 2020 (5 months)

- Worked with the IoT team in implementing & testing new features
- Upgraded existing firmware with some really cool features
- Developed automation tools and GUI to enhance productivity for some boring repetitive tasks.

LEARNING & CERTIFICATIONS

• **Python for Data Science and AI:** [View](#)

An online course organized by **IBM** and offered through **coursera**.

• **Mathematics for Machine Learning:** [View](#)

An online specialization (3 courses) organized by **Imperial College London** and offered through **coursera**.

1. **Linear Algebra.** [View](#)

2. **Multivariate Calculus.** [View](#)

3. **Principle Component Analysis(PCA).** [View](#)

• **IBM AI Engineering :** [View](#)

An online non-credit professional training (6 courses) organized by **IBM** and offered through **coursera**.

1. Machine Learning with Python. [View](#)

2. Scalable Machine Learning on Big Data using Apache Spark. [View](#)

3. Introduction to Deep Learning & Neural Network with Keras. [View](#)

4. Deep Neural Networks with PyTorch. [View](#)

5. Building Deep Learning Models with TensorFlow. [View](#)

6. AI Capstone Project with Deep Learning. [View](#)

HANDSON TECHNOLOGIES

Development Boards: Jetson Tx2/Nano, Raspberry Pi 2/3/4 , STM32MP157C, OpenMV, Esp32, Esp-8266, Arduino Uno Arduino Mega 2560, STM32F103C8T6

Software Tools & IDE: Eagle, Proteous, EasyEda, Circuit Maker, Keil, STM32CubeIDE, VS Code, Spyder, Arduino IDE,

FrameWorks: FreeRTOS

REMARKABLE PROJECTS

• **NybSys LMR Gateway (NS_LMRG100)** [View IWCE Expo 2021](#)

Designed, Developed, Tested & Deployed NS_LMRG100. [View Demo 2](#)

• **NybSys Smart Poultry Farm Automation.** [View](#)

Developed, tested & Deployed NSPF100 gateway & sensor nodes

• **NybSys Water ATM (B2B for Drink Well)** [View](#)

Upgraded the existing firmware to Version 3.1 & added new features

• **NybSys IoT Gateway (IG100)** [View](#)

Upgraded the existing firmware to Version 2.1 & added new features

• **NybSys Sentra Dispatch to Multicast Gateway (BackEnd Tool)**

Developed & Tested the tool that will run in the backend for scalability.

• **Weapon (Gun) Detection and Elimination**

For jewelry Shops and Bank Security :(Using ML & IoT) [View](#)

• **Bank Loan approval decision prediction (data model):** [View](#)

[N.B: Dataset was taken from kaggle and assigned to us by my Supervisor **Dr. Bikash Chandra Singh.**]

EDUCATION

B.Sc(Hons) in ICT

Islamic University, Bangladesh.

📅 2016 - 2020

CGPA: 3.31/4.00

Higher Secondary School Certificate

Dinajpur Government College

📅 2013 - 2015

GPA: 4.83/5.00

Secondary School Certificate

Maharaja Girijanath High School

📅 2011 - 2013

GPA: 5.00/5.00

PROGRAMMING SKILLS

Languages: Python3, Node JS, React ,C,C++

Embedded C, Java,Bash-Linux Shell Scripting.

Machine Learning: Numpy, Pandas, PyTorch

Tensorflow, Scikit-Learn, SciPy, matplotlib

OpenCV, Apache Spark, Keras.

Network Programming: socket, MQTT, RTP

Web Framework: Django

Scalability&Deployment: Docker, Unicorn

Database: MySQL, PostgreSQL, SQLite3

ML Algorithms: Statistical Modeling,SVM,

Neural Networks,Classification,Clustering

Generative Adversarial Networks(GAN).

SOFTWARE SKILLS

• **Class , ER & Sequence Diagram generation.**

• **S O L I D design patterns in practice.**

• **Object Oriented Programming.**

• **Clean & Standard Coding Practices.**

• **Multi Processing/ Threading.**

• **Event Handling.**

• **Inter Process Communication.**

• **Repetitive Task Automation.**

• **Dead Lock Prevention Precautions.**

• **Distributed Version Control with Git.**

PASSIONATE ABOUT

I want to build my carrier as an AI Engineer. Currently I'm learning several Machine Learning algorithms from online and applying them to several data-sets. It will be Interesting for me to work with people and/or company that concentrates on Artificial Intelligence or Big Data, Data Science. More specifically Data Mining, Deep Learning, Machine Learning and/or Computer Vision

REFERENCES

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