RAGHUNATH DIWAKARA

New York, NY

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EDUCATION

NEW YORK UNIVERSITY, New York NY

M.S., Computer Engineering, *Anticipated Graduation May 2021 (Available to start late June) - GPA 3.59*
Relevant Coursework: Data Structures and Algorithms, Probability Theory, Computing Systems Architecture, OS, Machine learning, Internet Architecture, ML for Cybersecurity, Statistics for Data Science.

RNS INSTITUTE OF TECHNOLOGY (VTU), Bangalore, India

B.E., Electronics and Instrumentation, *July 2017- GPA 3.93*

TECHNICAL SKILLS

Programming Languages: C, C++, Python, Java, JavaScript, Linux Shell, MATLAB, R, SQL
Packages: Pandas, Numpy, Scipy, Matplotlib, Seaborn, Tidyverse, SimPy, Scikit-learn, Imbalanced-learn, Keras
Softwares & Tools: Elasticsearch DB, Git, REST APIs, JQuery, MQTT, HTML, LabVIEW, LaTeX, Mathematica, Microsoft Office, Development Boards - RaspberryPi, Arduino, Tiva
Development Environments: Eclipse, Jupyter Notebook, Code Composer Studio.

EXPERIENCE

TAVANT TECHNOLOGIES INC., New York, NY
AI Summer Intern, June 2020 – August 2020

- Designed anomaly detectors through exploring telematics data and investigating the correlation between the occurrences of different errors.
- Built feature engineering pipelines to perform imputation and resampling of data with appropriate techniques.
- Built various ML classification models and evaluated the pipelines to judge for overfitting and generalization.

ROBERT BOSCH CENTRE FOR CYBER-PHYSICAL SYSTEMS, IISC, Bangalore, India
Project Assistant (Industrial Internet of Things), March 2018 - July 2019

- Developed and implemented network architecture and the architecture for sensor gateways.
- Designed algorithms in python to analyze real-time factory data and identify solutions resulting in a 62% reduction in energy consumption.
- Served as point of contact for industry partners.

ACCENTURE SOLUTIONS PRIVATE LIMITED, Bangalore, India
Associate Software Engineer, September 2017 – March 2018

- Performed requirement analysis and planning for software testing.
- Tested web applications by applying techniques of object-oriented programming.

PROJECTS

- Implemented cycle-accurate CPU simulator for MIPS ISA subset in C++.
- Implemented MODBUS stack on controller in C and built python based IoTgateway driver.
- Designed a High-Speed Data Acquisition system on LabVIEW.

PUBLICATION

- "Digital Twin for Energy Optimization in an SMT-PCB Assembly Line", IEEE IoTaIS, Bali, with Neha Karanjkar, Ashish Joglekar, Sampad Mohanty, Venkatesh Prabhu, Raghunath D and Rajesh Sundaresan, Indonesia, 2018
- "An Implementation of an Industrial Internet of Things on an SMT Assembly Line", IEEE COMSNETS, Bangalore, with Gaurav Bhandari, Ashish Joglekar, Prakash Hiremath, Anupama Kulkarni, Devadatta Kulkarni, Manu, Sampad Mohanty, D. Raghunath, Raju, Rajeev Shorey, Rajesh Sundaresan