Vamshi Bussa
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EDUCATION

University of Pittsburgh Pittsburgh, PA
MS in Computer and Information Sciences (Aug 2019 start) GPA: 3.7/4.0 Expected April 2021
Graduate Student Research Assistant under Prof. Heidi Donovan
Courses: Algorithms Design, Data Mining & Visualization, Advanced Databases, Adaptive Informative Systems, Interactive System design.

Mahindra Ecole Centrale (MEC)
BTech in Computer Sciences and Engineering minor in Finance Hyderabad
Graduated in First class. Dean's List for academic excellence in 2 semesters. May 2018
Awards: Received Dean's Students' Scholarship for 2 years. Activities: Founded Robotics club - 'Innovative Androids', 'Travel Club'.
Courses: Theory of computation, Cloud, Computer Architecture, Computer Networks, Operating Systems, Economics, Finance, Design Thinking.

TECHNICAL SKILLS

- Programming Languages – C, C++, C#, Python, Java, JavaScript (Angular and React), MERN, SQL Server, Asp.net, Matlab, Swift.
- Data Science & Engineering Tools – SPSS, SAS, Arena Simulation, R (ggplot2, dplyr), VBA, Tableau, TensorFlow, Keras, Pandas
- Others – Postgres SQL, Hadoop – MapReduce, Linux/Unix, GIT, Docker, Jenkins, Kubernetes, Springboot, AWS, Scala, Kafka.

PROFESSIONAL EXPERIENCE

TECH MAHINDRA Bangalore
Level 1 – Data scientist Jul 2018 – Jul 2019

- Worked on projects applying data science and analytic tools to address challenges on client side (Verizon, Logitech, Oracle) and across other internal teams within the company.
- Pioneered exploratory data analysis using SQL and Python and created visuals that revealed 3-4 years of empirical outcomes towards implemented policies for the company.
- Built machine learning pipelines using Python, optimized models by adding additional features, expanded training/testing, utilizing advanced models such as random forests, gradient boosting, lightgbm to achieve more than 90% accuracy.
- Led meetings with project clients and partners within the organization to define scope and ensure projects checkpoint, deployment and resulting in on-time deliverables and final products.

Tata Consultancy Services Hyderabad
Software Development Intern – Technology Division (Emerging Talent Program) May 2017 – Jul 2017

- Developed rich and interactive web platforms for internal applications. Built, deployed a chatbot for the client (KPMG) which gives live data from the stock market used by stockbrokers for efficient trading.

Deepredink Hyderabad
Software Development Intern – Technology Division May 2016 – Jul 2016

- Developed two dynamic web-based applications using MERN stack where one tool gives sentimental analysis of twitter data of a particular hashtag using NLP and the other tool gives converts audio/video data into text which is used by the marketing teams for survey.

ACADEMIC PROJECTS

INDOOR POSITONING SYSTEM Aug 2017 – May 2018
Semester Research Project, MEC (Advisor: Prof. Raghu Kishore N)

- Developed a novel algorithm to locate a network of devices used to wirelessly locate objects or people inside a building. Used numerous computational methods using different Deep Neural Networks.
- Improvised existing algorithm and we were able to reduce the error in distance measurement to few centimeters.

IMPLEMENTATION OF NETWORK PROTOCOL Sep 2018 –Dec 2018
Semester Research Project, MEC (Advisor: Prof. Bruhadeshwar Bezawada)

- Designed a protocol for file and folder transfer, implementing it using python. Experimenting with different kinds of files and file hit rate.

GRAMMAR BASED CODES Feb 2017 – May 2017
Semester Research Project, MEC (Advisor: Prof. Bruhadeshwar Bezawada)

- Developed a novel algorithm to search subsequence string in a given DNA sequence.
- Used various computation methods with Context Free Grammars (CFG) for pattern matching and we were able to compress the string simultaneously while searching.

CHANNEL CODING AND DATA COMPRESSION Feb 2015 – May 2015
Semester Research Project, MEC (Advisor. Prof. Bhanukiran P)

- Developed algorithms used in compression techniques by learning the original work of Shannon's theory of channel coding and was able to successfully implement.