

## EDUCATION

### University of Pittsburgh

MS in Computer and Information Sciences (Start Fall: 2019) GPA: 3.75/4.0

Graduate Student Research Assistant under Prof. Heidi Donovan, Dr. Nicolas Farnan

Courses: Algorithms Design, Data Mining & Visualization, Advanced Databases, Adaptive Informative Systems, Interactive System design, HCI.

Pittsburgh, PA

Expected April 2021

### Mahindra Ecole Centrale (MEC)

BTech in Computer Sciences and Engineering

Graduated in First class. Dean's List for academic excellence in 2 semesters.

Hyderabad

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 (node.js, Angular and React), Matlab, Swift, Go, Scala, Spark
- Frameworks & Tools – SPSS, SAS, R (ggplot2, dplyr), Tableau, TensorFlow, Keras, Pandas, Pytorch, Redis, Cassandra, Neo4j.
- Others – Postgres SQL, Hadoop – MapReduce, Linux/Unix, GIT, Docker, Jenkins, Kubernetes, Springboot, AWS, RabbitMQ, Kafka.

## PROFESSIONAL EXPERIENCE

### Philips USA – Advanced Innovations Team

Pittsburgh, PA

#### Software Development Intern

May 2020 – Dec 2020

- Worked on multiple end to end projects, building android apps & compatible WearOS watch apps using Kotlin, Java & Spring with direct application to data science, analysis of patients to address challenges on Health care industry.
- Involved extensively and worked closely with team architects, senior engineers to develop a group of well-connected monolith micro services connecting backend, machine learning pipelines to stream tranches of data from user's end and other end points.
- Independently wrote multiple API functions in node.js, python which will route data from wearable devices to cloud based backend including Firebase, GCP and AWS. Involved in brain storming sessions with UX team to learn design philosophies.
- Developed patient-physician payment gateway for a portal used by many Philips client-based hospitals across USA.
- Worked closely with R&D team on multiple patentable devices to improve millions of people lives by solving sleep issues using advanced technology, where I was a co-author of a filed invention disclosure (ID- 2020ID01002, **Patent pending**).

### Tech Mahindra

Bangalore

#### Jr Data Scientist

Jul 2018 – Jul 2019

- Worked on projects applying Data science and Machine learning techniques to address challenges on client side (Verizon, Logitech, Oracle) and across other internal teams within the company by regularly gathering requirements from stakeholders.
- Pioneered exploratory data analysis using SQL and Python and created visuals that revealed 3-4 years of empirical outcomes towards implemented policies. Built end to end machine learning pipelines using Python, Scala and Kafka. Optimized models by adding additional features, utilizing advanced models such as feed forward neural nets, xgboost, lightgbm to achieve more than 85% accuracy. Used LSTM RNN to improve demand forecasting over existing time series techniques.
- Took responsibility and led project meetings with clients, leadership team and partners within the organization to define scope and ensure project's checkpoint, resulting in on-time deliverables while balancing the budget, client needs and final products

### Tata Consultancy Services

Hyderabad

#### Software Development Intern (Emerging talent programme)

May 2017 – Jul 2017

- Developed rich and interactive web platforms using MEAN stack for internal applications. Developed, deployed a chatbot for the client (KPMG) using Docker, minikube gives live data from the stock markets used by stockbrokers for efficient trading.

### Deepredink

Hyderabad

#### Software Development Intern

May 2016 – Jul 2016

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

## SELECTED ACADEMIC PROJECTS

### INDOOR POSITONING SYSTEM

Aug 2019 – May 2020

#### Research Project, UPitt (Advisor: Prof. Jacob Biehl)

- Developed an application relying on 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.

### GRAMMAR BASED COMPRESSION

Jan 2017 – May 2018

#### Semester Research Project, MEC (Advisor: Prof. Bruhadeshwar Bezawada)

- Developed an algorithm to search subsequence string in a given complex sequence of data. Used various computation methods with Context Free Grammars (CFG) for pattern matching and we were able to compress the string simultaneously while searching. Algorithm is a C++ implementation of LCA, it takes a text as input and builds a straight-line program consisting of restricted production rules in a context free grammar. Our implementation uses a variable-length dictionary for memory-efficiency. Moreover, it is possible to extract substrings from the compressed text without decompressing it and to compute the suffix as a byproduct.