Venkata Subba Narasa Bharath Meadam

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EDUCATION

- **Stony Brook University** **Aug'19 – Dec'20**
  Master of Science In Computer Science **GPA: 3.54/4**
  - **Relevant Coursework** – Operating Systems, Algorithms, Probability & Statistics
- **Shiv Nadar University** **GPA: 8.24/10**
  B.Tech in Electronics And Communication Engineering **Aug'13 – May'17**

EXPERIENCE

- **Amazon Web Services** ***Seattle, USA***
  Software Engineer Intern ***Jun'20 – Aug'20***
  - Developed an Alexa skill to track the pre-onboarding process of new employees joining Amazon.
  - **Technologies used**: AWS Lambda, S3, DynamoDB, API Gateway, IAM
- **Hewlett Packard Inc, PPS R&D Hub** ***Bengaluru, India***
  Software (Cloud) R&D Engineer I ***Sep'17 – Jul'19***
  - Designed and Implemented **RESTful web-services** for **cloud printing** for the next-gen HP Printers using **Spring framework** and deployed in **AWS** to support a load of 10 million printers with minimum latency.
  - Enhanced the Core Connectivity Layer of HP's Web Print Platform to **reduce infra cost** and deliver better performance. Reduced the cloud infra cost by 8% by **optimizing the TLV packet** exchanged between the HP printer and the cloud.
  - **Technologies/Concepts used**: EC2, Lambda, S3, DynamoDB, Spring, Distributed Systems. Jenkins, Splunk

  Software Engineer Intern ***Jan'17 – Aug'17***
  - Made a POC on **"Enabling web services on HP's Inkjet printer using AWS IoT"** which could be plugged into HP's existing cloud infrastructure.

TECHNICAL SKILLS

Programming	: Java, Python, C, Spring, Hibernate, MATLAB, SQL, NoSQL database
Technologies and Frameworks	: AWS, DynamoDB, IoT, Lamba, EC2, Maven, Git, Spring, Splunk, REST
ML Libraries	: Numpy, TensorFlow, Pandas, Scikit-Learn, Keras, Open CV, Caffe
Operating Systems	: Windows, Linux, macOS

PROJECTS

- **Design and implementation of Dynamic Memory Allocation**
  - Implemented dynamic memory allocation of the heap in C programming for efficient usage of memory on a Unix platform.
  - The design of the algorithm is the way to **optimize the throughput and fragmentation** of the allocated memory. **Created own implementations of malloc, realloc and free for the x86-64 architecture.**
  - **Concepts used**: Memory allocation - malloc, realloc, free, calloc.
- **Statistical Analysis of COVID-19 in Chicago**
  - Performed Statistical Analysis on COVID-19 cases and fatalities reported in Chicago across different age groups and genders.
  - **Concepts used**: Time Series Analysis, EWMA, Auro-Regression.
- **Alexa Voice Skill for smart diagnosis(printer)**
  - Developed an Alexa Voice Skill to diagnose web-connected HP printers.
  - Deployed the voice skill in AWS Lambda and the backend API's on AWS EC2 and AWS Dynamo DB for the database.
- **Multi Threaded PBX Server in C**
  - Simulated the behavior of a Private Branch Exchange (PBX) telephone system by implementing a multi-threaded server in C.
  - Implemented both calling and messaging features for multiple clients simultaneously
  - **Concepts used**: POSIX Threads, Mutexes, Semaphores, Socket Programming.
- **Implementation of Object Detection for Autonomous Driving**
  - Built a deep-learning model using YOLO algorithm to detect cars using the publicly available dataset from drive.ai.
  - The model takes a plain input image and outputs a list of bounding boxes whichever objects it recognised as cars.

ADDITIONAL SKILLS/QUALIFICATIONS

- Deep Learning Specialization (Coursera) ***Mar'18***
- Machine Learning (Coursera) ***Jul'17***