Harsha

https://asystemsguy.github.io

Email : devkhv129@gmail.com
Mobile : +1-604-679-7845

EDUCATION

- **University of British Columbia** — Vancouver, BC, Canada
  Master of Applied Science in Computer Engineering; Percentage: 88.5 — *Sept. 2017 – Present*

- **Manipal Institute of Technology** — Manipal, India
  Bachelor of Technology in Computer Science; GPA: 8.86/10.0 — *June. 2011 – July. 2015*

EXPERIENCE

- **University of British Columbia** — Vancouver, BC, Canada
  Research and Teaching Assistant — *Sept 2017 - Present*
  - **Research Assistant - Distributed Cloud Native Systems**: Research on cluster schedulers for microservices applications. Modeling inter-dependencies between services & strategies to improve performance and resource utilization in shared clusters. Currently developing a extension to Kubernetes to work with devops pipelines in public clouds.
  - **Lead student - IBM CAS Fellowship Project**: Lead a team of three to work with IBM cloud team to identify reliablity issues in their microservices deployments.
  - **Teaching Assistant - Computer Networks and Engineering Design Studio**: Each of the courses has more than 80 third year udergrads enrolled. Involved in creating assignment, exams and conducting recitation sessions.

- **Siemens** — Bangalore, India
  Systems Software Engineer — *July 2015 - July 2017*
  - **Angiography**: TensorFlow is an open source software library for numerical computation using data flow graphs; primarily used for training deep learning models.
  - **X-ray Generator Simulation**: Apache Beam is a unified model for defining both batch and streaming data-parallel processing pipelines, as well as a set of language-specific SDKs for constructing pipelines and runners.
  - **Touch based interface for collimeter**:

- **SanDisk** — Bangalore, India
  Graduate Intern — *Jan 2015 - June 2015*
  - **SSD Simulator For Interation testing**: Service for sending email, push and in-app notifications. Involved in features such as delivery time optimization, tracking, queuing and A/B testing. Built an internal app to run batch campaigns for marketing etc.
  - **Develop Enviroment for FTL in Linux** : Bulk data processing and injection service from Hadoop to Cassandra and provides a thin REST layer on top for serving offline computed data online.

PROJECTS

- **Energy Mangement System for Android Kernel**: Open source python library for financial data analysis and machine learning for finance.
- **REST API Library Over Named Data Networking**: Data Visualization of Git Log data using D3 to analyze project trends over time.
- **MPI Cluster Network Simulator Using Linux Traffic Control**: Music and Movie recommender systems using collaborative filtering on public datasets.
- **Cluster Scheduler for Federated Clusters**: Book that gives step by step instructions on setting up developer environment on Mac OS.

AWARDS

- **Innovation Ambassador - Siemens - 2016**: Open source python library for financial data analysis and machine learning for finance.
- **Purskar Award - Siemens - 2015**: Data Visualization of Git Log data using D3 to analyze project trends over time.

SKILLS

- **Programming Languages**: C++, Go, Python

- **Technologies**: Cloud(AWS,Google cloud, IBM cloud), Kubernetes, Docker, GCE