Hariprasath Parthasarathy

Email: hparthas@buffalo.edu Mobile: +1-716-427-9783

EDUCATION

• University at Buffalo(State University of New York)

Buffalo, NY

Master of Science in Computer Science and Engineering

Aug. 2018 - Dec. 2019

Coursework: Analysis of algorithms, Computer vision and image processing, Operating systems,
Distributed System, Database Systems, Malware Detection using static analysis

• Sri Ramakrishna Engineering College

Coimbatore, India

Bachelor of Engineering in Computer Science and Engineering.

Aug. 2013 - July. 2017

EXPERIENCE

• Amazon Services Inc

Seattle, WA

Software Development Engineer Intern, Amazon Devices

Summer 2019

- Vision and Machine Learning based Screening- (Computer Vision, Machine Learning, Java, Spring, Angular):
 - * Tools to improve flow in warehouses. The tools created by me improved to rate of dispatches by 10%
 - * Process return screening in warehouses with computer vision and machine learning. Accrately 92%

• University at Buffalo

Buffalo, NY

Research Programmer - UB-ANC - Drones Lab

Spring 2019

- Drones navigation system EMANE Integration (EMANE, NS3, LXC Containers):
 - * Modified UB's inhouse drone simulation to support AFRL's EMANE network simulator.
 - * Support integration with LXC containers that would facilitate Distributed simulation.

• Zoho Corporation

Chennai, IN

 $Member\ technical\ Staff\ -\ Zoho\ labs\ -\ Research\ and\ Development$

May 2017 - May 2018

- Cstore -FDW (Columnar storages ,OLAP systems):
 - * Modified CITUSDB CStore FDW to accommodate in-memory caching, deletes and JIT executor.
 - * The JIT executor improved query performance by a factor of 8 10 on OLAP queries of 30 million rows.
 - * Deployed Cstore system backing kafka/mysql across 30 clusters.

• Zoho Corporation

Chennai, IN

 $Member\ Technical\ Staff\ Intern\ -\ Zoho\ labs\ -\ Research\ and\ Development$

Jan 2017 - Mar 2018

- In Memory Foreign Data Wrapper For PostgreSQL (Database Design, C with LLVM, codegen API):
 - * Designed and implemented the storage engine and executor as a foreign data wrapper for postgreSQL.
 - * Successfully implemented lock free indexing(BW tree) and write-ahead logging.

• Sri Ramakrishna Engineering College - Centre For Innovation

Coimbatore, India

 $Undergraduate\ Research\ /\ Student\ Chairman$

Aug. 2015 - Dec. 2016

- Fleet Management System -(Android, AngularJS-2, Redis, Embedded C Programming):
 - * Led a team of 4 people to Design and implement hardware and software for the fleet management system.
 - * Detect irregular driving patterns and approximate time of arrival for institutional vehicles.
 - * Proved its commercial viability And was Implemented for 50 vehicles for SNR Trust.
- Industrial Data Logging (Arduino, Mysql, PHP):
 - * A real-time system used to extract production data from CNC machines. It aided proper planning and execution of orders in micro industries.

Skills and Interest

- Languages: Proficient in C, C++, PostgreSQL Internals, familiar with Android, Java, Python, Javascript
- Tools: GIT, Kubernetes, Docker, Amazon web services, Linux, LAMP Stack