# Aprameya

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## Professional Experience \_\_\_

#### **Binghamton University (SUNY)**

Binghamton, NY

RESEARCH PROJECT ASSISTANT

May.2017 - August.2017 & December.2017 - June.2018

- Worked on Operating System Virtualization concepts: virtual CPU scheduling and processes pinning, aiming at improving the performance of the virtual
- Worked on live replacement of hypervisor and reducing the hypervisor involvement in virtual machines operations

#### **Binghamton University (SUNY)**

Binghamton, NY

GRADUATE TEACHING ASSISTANT

August.2017 - December.2017

- Worked on research project 'Performance impact of increasing the virtual CPU count in virtual machines' aiming to improve the performance and keeping it constant with increasing number of virtual cpus in virtual machine by eliminating process and threads scheduling and load balancing
- Graduate teaching assistant for CS550 Operating Systems & CS451/551 -Systems Programming
- · Conducted classes and exams, clearing student doubts, correcting homeworks, tests and assignments

**Evry India Pvt Ltd** Bangalore, India

SOFTWARE ENGINEER ASSOCIATE

July.2015 - July.2016

- · Developed backend in MVC model using C# and database connectivity using ADO.NET, building REST API's for communication and writing various busi-
- Developed GUI in MVC model using JavaScript & HTML
- Developed unit test cases for complete coverage of both the frontend(JavaScript & HTML) and backend(C#) code

## Education

## **Binghamton University (SUNY)**

Binghamton, NY

MASTER OF SCIENCE IN COMPUTER SCIENCE

August.2016 - May.2018

- · Courses:Computer Algorithms, Adv Topics in Cloud Computing, Computer Networks, Systems Programming, Operating Systems, Programming Languages, Computer Origination and Architecture
- GPA: 3.81/4.0

#### Visvesvaraya Technological University

Mangalore, India

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE

August.2011 - May.2015

## **Projects**

#### **Hypervisor Optimization**

Binghamton, NY

RESEARCH PROJECT WITH PROF. KARTIK GOPALAN & INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE, TAIWAN Optimizing the Linux kernel to reduce the hypervisor involvement in virtual machines operations March.2018 - June.2018

- Working on reducing the hypervisor overhead in network transaction through VFIO and PCI-passthrough

## **Live Replacement of Hypervisor**

Binghamton, NY

RESEARCH PROJECT WITH PROF. KARTIK GOPALAN, FUNDED BY NATIONAL SCIENCE FOUNDATION

December.2017 - June.2018

- · Designing and developing a system with the goal to replace the running hypervisor with the new one on the go
- · Replacing the running hypervisor with the fresh copy while eliminating the need to stop running virtual machine

## Performance impact of increasing the virtual CPU count in virtual machines

Binghamton, NY

RESEARCH PROJECT WITH PROF. KARTIK GOPALAN

May.2017 - June.2018

- Developing with a goal to keep the performance of the virtual machine constant with increasing number of virtual cpus
- · Aiming to increase the performance of the virtual machine by pinning the processes to the virtual cpus

#### **Socket Programing** DEVELOPER

Binghamton, NY

October.2017 - November.2017

- Implemented Conference application with client server architecture
- Designed and developed Virtual network routing using Distance Vector routing algorithm

DEVELOPED IN COORDINATION WITH BALMATTA DIAGNOSTIC AND RESEARCH CENTER LTD, MANGALORE

· Multithreaded HTTP Proxy with Caching

DEVELOPED AT EVRY INDIA, FOR A USA BASED MORTGAGE COMPANY

## **Good Faith Estimate**

**ISpan** 

Bangalore, India July.2015 - May.2016

· Implemented new logic and functionalities using C# ASP.NET MVC as per USA mortgage requirements in agile methodology

DEVELOPED AT EVRY INDIA PVT LTD

Bangalore, India March.2016 - July.2016

· Internal system used to track the employee efforts designed and developed using C# ASP.NET as per the company requirements

## **Data Embedding in Medical Images**

Mangalore, India

December.2014 - April.2015

· Designed and developed data hiding in MRI DICOM image based on region of interest using discrete cosine transformation

## Technical Skills $\_$

Languages

C, C#, Java, HTML, CSS, Javascript, Shell script, JQuery

Other technologies ASP.NET, MVC, MS Visual Studio, Eclipse, Jira, T-SQL, SVN, Github, Agile Methodology