Ratnadeep Bhattacharya

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I am Ratnadeep Bhattacharya, a PhD student in the Department of Computer Science, George Washington University. I am part of the Cloud Systems Lab and my advisor is Prof. Timothy Wood. I have extensive experience in the industry designing and building data centers

Education

George Washington University
PhD, Computer Science
Advisor: Dr. Timothy Wood
August 2018 – May 2023 (Expected)

West Bengal University of Technology
Bachelor of Technology, Electrical Engineering - 7.41/10

National Merit Scholarship, 2000 – 2002, Government of India

Research Interests

- Network Function Virtualization (NFV), Edge Computing, Data Center/Cloud Networks and Systems
- Using Machine Learning and Queuing Theory for dynamic resource management

Research Experience

- Multi-Query Scalable Isomorphic Subgraph Matching in Large Graphs, January 2019 – present
- Applying Machine Learning to classify resource usage by NFV applications, January 2019 – present
- Using Classification to identify SLA compliance of applications hosted on virtual machines, 2014, Bank Muscat, Muscat, Oman

Skills and Attributes

- Comfortable programming with Python, C and Bash. Familiar with Java
- Working knowledge of Linux and Unix variants
- Working knowledge of machine learning and the scikit-learn library.
- Familiar with the Ryu SDN controller and OpenFlow 1.3 standard
- Familiar with NFV and DPDK

Certifications

- VMware Certified Professional (VCP3, VCP4, VCP5) – Data Center Virtualization (all now expired)
- Oracle Certified Associate, Solaris 11 System Administration

Work History

- **George Washington University** – August 2018 till present
    - Currently working as a Research Assistant for Dr. Timothy Wood
- **IMTAC LLC** – June 2012 to July 2018
    - Analyze business needs of customers and translate the same to technical design.
    - Support clients to set up disaster resistant infrastructure using products from multiple vendors.
- **IBM India** – February 2011 to June 2012
    - Maintaining the virtual infrastructure of a major commercial bank in USA.
    - Mentoring team members on VMware related technology.
- **KPIT Cummins** – May 2009 to February 2011
    - KPIT Cummins was VMware Inc's support partner in India between 2009 and 2011. I was recruited to provide support to the North American customers of VMware Inc on VMware's range of product.
    - Mentor and lead a team of 6 engineers.
    - Recruit new engineers and deliver part of their training program.
    - Write knowledge base articles as and when required
- **HP Globalsoft** – January 2009 to May 2009
    - Provide support for HP customers on HP Proliant servers and HP MSA storage.
- **HP** – September 2008 to December 2008
    - Provide field support to HP customers.
- **Keane India** – July 2009 to July 2008
    - Provide support to Unisys and IBM mainframes. Also support windows and Linux servers. All in the internal data center.
    - Provide support to internal users.

Teaching Experience

- Teaching Assistant, Operating Systems, Fall 2018