Aditya Kumar

EDUCATION

College Station, TX

Texas A&M University

• Master of Computer Science. GPA: 4.0/4.0

- Major Coursework: Artificial Intelligence; Cloud Computing; Information Retrieval; Neural Networks
- Graduate Assistant (GA) in the Department of Information Technology, Division of Student Affairs

Calicut, India

National Institute of Technology

• Bachelor of Technology in Computer Science and Engineering. GPA: 9.37/10.0

LANGUAGES & TECHNOLOGIES

- C++ (Proficient), Java (Prior Experience), C, Python, MySQL, Shell Scripting, PHP, HTML, CSS
- Dynamo DB, S3, Lambda functions, Elasticsearch, Git, JavaScript, jQuery

EXPERIENCE

Software Engineer

• Part of Visual Studio Codespaces team. Codespaces provides cloud-powered development environments.

Microsoft

Software Development Intern

• Developed and launched highly-scalable internal service (1000 TPS) based on service-oriented architecture (SOA) using various AWS technologies like DynamoDB, Lambda, S3, etc. (Java, Python, SQL, shell).

Amazon Inc.

• Automated data migrations with distributed job scheduling and built a responsive single-page application (SPA) in React.js for the service which is used for analytics.

Software Engineer, R&D **Sandvine Technologies** June 2016 – July 2018

- Automated parameter calibration in fuzzy control system by developing service using C++ capable of monitoring network traffic over 100,000 locations.
- Designed REST APIs for traffic shapers in C++ enabling dynamic policy enforcements without system reloads. This saves 9 hours (average) of maintenance time per month.
- Developed hash map and timers based internet traffic classification mechanism in C++ improving identification of applications that rely on third-party services by 90% (on average).

PROJECTS

- Reverse Image Captioning: Developed Generative Adversarial Network (GAN) which takes textual description as input and generates image fitting the description. (Python, PyTorch)
- Deep Person Re-Identification: Developed occlusion immune Re-Id model using Random Erasing and reduced pose variation influence by using Pose normalized Generative Network(GAN). (Python, PyTorch)
- Decentralized Howdy: Developed a decentralized application for student record storage based on smart contracts using Solidity.
- Multikernel Simulation: Enhanced memory management unit of Xen hypervisor by adding in-memory table to prevent rollback attacks and published the research in IEEE ISCBD 2017. (C, C++)

ADDITIONAL INFORMATION

- Leadership: Treasurer (2018 2019), Computer Science Graduate Student Association (CSEGSA)
- MOOCs: Neural Networks and Deep Learning by deeplearning.ai; Structuring Machine Learning Projects by deeplearning.ai; Machine Learning by Stanford University on Coursera; Design Patterns on Udemy

August 2018 – May 2020

July 2012 - May 2016

June 2020 – Present

June 2019 – August 2019