Arjun Kashyap

Contact Information

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Research Interests

I am interested in working on computer networks, mobile and wireless networks, security and systems.

Education

University of Wisconsin-Madison, Madison, WI, USA

Master of Science, Computer Science Sep 2017 - May 2019 (expected)
(CGPA: 3.91/4)

National Institute of Technology (NIT) Trichy, Trichy, India

*Bachelor of Technology (*Honors*), Instrumentation & Control Engineering* July 2010 - May 2014
(CGPA: 9.16/10, Rank: 2/96)

Research Experience

Graduate Researcher, UW-Madison, WI, USA

Adviser: Prof. Suman Banerjee

- **Trusted platform for edge compute nodes** Sep 2018 - Present
  Exploring a mechanism for the cloud server and the client to trust the edge compute platform on which client applications would run.
  - Creating a solution on ParaDrop, an edge computing platform, to ensure that the edge node's software/hardware has not been tampered with and running only the desired software packages.

Professional Experience

University of Wisconsin-Madison, Madison, WI, USA
Project Assistant Jan 2018 - Dec 2018

Microsoft Corporation, Redmond, WA, USA
Summer Intern (Business Applications Group) May 2018 - Aug 2018

Oracle India Pvt Ltd, Hyderabad, India
Senior Software Developer (Full stack development) June 2014 - Jul 2017

Teaching Experience

Department of Computer Science, UW-Madison
Project Assistant, CS 537: Introduction to Operating Systems Sep 2018 - Present

- Served as one of the two graders for a class of 265 students, with duties of grading quizzes and helping students with any queries related to them.

Department of Computer Science, UW-Madison
Project Assistant, CS 640: Introduction to Computer Networks Jan 2018 - May 2018

- Served as one of the two graders for a class of 110 students, with duties of grading quizzes and holding office hours to help students on reviewing quizzes.

Software Skills

Programming Languages - C, C++, Java, Javascript, Python, Verilog, SQL, TypeScript MATLAB
Servers & Web containers - Weblogic, Tomcat
Web Technologies - HTML, CSS, NodeJS, Bootstrap, React, JQuery, RequireJS, Knockout
Databases - Oracle, MySQL

Coursework

UW-Madison

CS 537 Introduction of Operating Systems
CS 640 Introduction to computer Networks
CS 707 Mobile & Wireless Networking
CS 740 Advanced Computer Networks
CS 760 Machine Learning
CS 839 Data Science
CS 839 Topics in Security & Privacy

Other

Data Structures & Algorithm
Database Design
Information security

Projects

Study of Request-Routing in Content Delivery Networks

UW-Madison (Course: Adv. Computer Networks, with Prof. Paul Barford) Sep 2018 - Dec 2018

Performed a study of request-routing algorithms and mechanisms in CDNs, subject to varied network conditions. Discovered whether the request routing algorithms of a CDN actually determines the best edge server with respect to client perceived latency. [Code] [Report]

Evaluating Differential Privacy Mechanisms for Network Trace Analysis

UW-Madison (Course: Topics in Security & Privacy, with Prof. Justin Hsu) Sep 2018 - Dec 2018

Evaluated numerous differentially-private mechnanisms on the static network dataset at packet and flow-level granularities. Applied the continual counter to a stream of (live) network data to output *top-k items* without compromising privacy of the user. [Code]

Embedding a canvas component in a model-driven form designer

Microsoft (Mentor: Syed Adnan Ahmed) May 2018 - Aug 2018

Designed a framework to create canvas-based components in PowerApps to allow an application author/developer to use them out-of-the-box instead of creating a component from scratch.

Coordination server for SAFER Home

UW-Madison (Adviser: Prof. Suman Banerjee) Jan 2018 - May 2018

As a member of the Safer Home prject, designed a server in ParaDrop, an edge computing platform, which coordinates messaging and video streaming during normal and emergency situations. The project was selected for application development award in US Ignite. [Link]

Entity Matching using Machine Learning

UW-Madison (Course: Data Science, with Prof. AnHai Doan) Feb 2018 - April 2018

Performed entity matching of books from raw data of Amazon and GoodReads using Magellan. [Code]

Honours and Achievements

Application development award from US Ignite for SAFER Home project.

Conferral of the *First Class with Distinction* for Bachelors of Technology degree in NIT Trichy, 2014 (Requires a CGPA above 8.5 out of 10).

Granted *academic proficiency* prizes at NIT Trichy in 2012 and 2013 for being among the top 3 students in the department.

Achieved a rank 2/96 in instrumentation & control engineering department in NIT Trichy.

Extracurricular Activities

Runner up in Table-Tennis in Annual Sports & Games 2011-2012 at NIT Trichy.

Manager of Pragyan Workshops team from 2012-2013 which organizes and conducts technical workshops for college students.