

ABHINAYA S B

Raleigh, NC | asrivid@ncsu.edu | go.ncsu.edu/abhinaya | linkedin.com/in/sbabhinaya

EDUCATION

North Carolina State University (NCSU)

PhD in Computer Science; *Advised by Dr. Anupam Das (WSPR lab)*

Courses: Computer and Network Security, Computer Networks,

Design and Analysis of Algorithms, Research Methods in Human-Centered Computing

Raleigh, Aug 2022 - Present

CGPA: 4.00/4.00

National Institute of Technology, Tiruchirappalli (NIT Trichy)

Bachelor of Technology (Honours) in Computer Science and Engineering

India, Jul 2015 - May 2019

CGPA: 9.74/10.00

SKILLS

Additional Courses	Usable Security, Human Computer Interaction, Privacy & Security in Online Social Media
Programming	C, C++, Python, Java, Tensorflow, HTML/CSS, Javascript, Three.js, Angular.js
Software	Android Studio, MATLAB, Network Simulator, Trace32, Zotero, L ^A T _E X
Methods	Survey Design, Interview Design, Qualitative Analysis

WORK EXPERIENCE

NC State University, Dept. of Computer Science

Raleigh, Aug 2022 - Present

- **Research Assistant** in Prof. Anupam Das' group: Perform Usable Security and Privacy Research in Virtual Reality.
- **Teaching Assistant** for CSC 433 Privacy in the Digital Age (Spring '23), CSC 326 Software Engineering (Fall '22)

Qualcomm, Software Architecture team

Bengaluru, India, Jul 2019 - Jun 2022

- **Engineer:** Designed a prototype to overcome resource availability constraints for concurrent workloads on the Neural Signal Processor (NSP); added support for testing the NSP across 2 simulators, 1 emulator, 2 Linux and 1 Windows based platforms.
- **Associate Engineer:** Developed a suite of tests and support tools for Snapdragon's NSP that identified 5 critical HW issues; presented work at internal conferences, Qbuzz (India) and ML Summit (international) with 3K+ total attendees.
- **Interim Engineering Intern:** Analyzed Google's Pixel Visual Core based image capture to derive architectural insights.

RESEARCH & PUBLICATIONS

Studying Harassment in Virtual Reality, *Prof. Anupam Das*

NCSU, Aug 2022 – Present

- Conducted a qualitative study to understand the different safety controls and reporting mechanisms in VR.

B.Tech. Thesis: Chatbot for Education, *Prof. Jaya Nirmala*

NIT Trichy, Jan 2019 – May 2019

- Implemented a Question Answering and Quiz Generation Chatbot for Education using NLP techniques in Python. Presented at **Grace Hopper Celebration India, 2019**, and published in IEEE Xplore. **[Paper]**

System-level Optimization of ADV algorithms, *Prof. Mittal*

IIT Hyderabad, Dec 2018 – Jan 2019

- Conducted experiments for system-level optimization of ADV perception algorithms (YOLOv3) for embedded systems (NVIDIA Jetson Xavier & Nano) using ROS. Poster presented at Intel India Research Colloquium, 2019.

Literature Review: Security in GPUs, *Prof. Mittal*

IIT Hyderabad, Dec 2017 - Jan 2018

- Reviewed research on security in GPUs and published in the Journal of Hardware and Systems Security. **[Paper]**

AWARDS & FELLOWSHIPS

College of Engineering Graduate Enhancement Award: Awarded 2850 USD by the College of Engineering

Poster presentation at Graduate Student Symposium: Nomination by the Computer Science department

NC State University Graduate Fellowship: Awarded 4000 USD for the first year of PhD (given to top applicants)

LEADERSHIP

Vice President, Public Relations, *Qonverse*, Toastmasters club at Qualcomm, Bengaluru, India

2021

Manager, *Content for Pragyan & Computer Science and Engineering Association*, NIT Trichy

2018-19