ABHINAYA S B

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EDUCATION

North Carolina State University (NCSU) *Raleigh*, **Aug 2022 - Present**
PhD in Computer Science; *Advised by Dr. Anupam Das (WSPR lab)* CGPA: **4.00**/4.00
Courses: Computer and Network Security, Computer Networks,
Design and Analysis of Algorithms, Research Methods in Human-Centered Computing

National Institute of Technology, Tiruchirappalli (NIT Trichy) *India*, **Jul 2015 - May 2019**
Bachelor of Technology (Honours) in Computer Science and Engineering 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, LaTeX
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

Poster presentation at Graduate Student Symposium: Nomination by the Computer Science department
4000 USD fellowship: NC State University Graduate Fellowship 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**