

Muskan Gupta

muskan@vt.edu | [LinkedIn](#) | Blacksburg, VA | Looking for Full-time roles

TECHNICAL SKILLS

Proficient: Python, JavaScript, Scala, C, C++, Data Structures, Algorithms, Debugging

Familiar: React, Node.js, HTML, CSS, UX Research, Apache Spark, Design Thinking, Deep Learning

Certifications: [Scala](#), [Stanford ML/Deep Learning](#), [CITI Social & Behavioral Research](#), [Queer Rights, Allyship](#)

Softwares: VS Code, GitLab, GitHub, Zeppelin/Jupyter Notebook, Google Suite, Google Colab, Amazon EMR

EDUCATION

Virginia Tech

Aug 2021 - June 2023 (Expected)

Master of Science (Thesis) in Computer Science & Applications (Current GPA: 3.95) Blacksburg, VA

- **Courses:** UI Software, UX, NLP, Social Computing, Virtual Environments, Computing for Social Good
- Student Scholarship by AnitaB.org for Grace Hopper Celebration 2022
- Research in Human-Computer Interaction (HCI) at EchoLab | Student Council Member at Center of HCI

Manipal Institute of Technology

Jul 2013 – Jul 2017

Bachelor of Technology in Computer Science (CGPA: 9.34/10, Rank: 8/220) Manipal, India

- Community Leader- Women Techmakers (Google's initiative) | Co-manager- Google Developers Group

RELEVANT WORK EXPERIENCE

The Trade Desk - Software Engineer Intern in Identity team - Bellevue, WA

May 2022 - Aug 2022

- Designed and implemented a feature which filters out outliers which were Device Out-of-Home advertising before generating Identity graph for targeted individuals.

Juniper Networks - Software Engineer 2 in Routing Protocols - Bangalore, India

Oct 2017 – Aug 2021

- Led the team of 5 for streaming telemetry Source Packet Routing feature with design discussions, implementation, solving bottlenecks and timely delivery to management. Collaborated with Platforms team.
- Solved 125 problem reports including various high priority, customer related issues in Routing Protocols.
- Mentored 2 new joiners in our team remotely to have a smooth transition to work virtually.
- Increased Juniper's Intermediate System to Intermediate System (ISIS) protocol support on multi-vendor networks to 80% by adding a streaming telemetry feature to monitor network data with incremental updates.
- Reduced debugging time by 30 mins per engineer by developing feature to get traffic statistics of routers running Open Shortest Path First (OSPF) which helped in showing anomaly in packets transferred.

RESEARCH AND TECHNICAL PROJECTS

Understanding Social Media User's Perceptions on Trigger & Content Warnings- EchoLab Ongoing

- Conducting semi-structured interviews (n = 20) after screener to analyze people's perceptions of trigger/content warnings on social media and find limitations/misunderstandings in the current practice of these warnings.
- Conducting open and axial coding on the transcripts to answer the above & improve design around warnings.

Immersive Embodiment to Generate Empathy for Transgender People - Virginia Tech

May 2022

- Analysed data using LDA to get general topics on transgender experiences & immersive embodiment after conducting 6 semi-structured interviews & a survey (n=34) of trans individuals, policymakers & VR researchers.
- Conducted thematic analysis to present themes on embodiment experience to generate empathy for trans folks.

Social Media Perspectives Toward Transgender People in Sports Over Time - Virginia Tech

May 2022

- Investigated the topics, moral foundations, & temporal characteristics in the dialogue on trans people in sports in Python using a Twitter corpus collected over 10 years as a representation of social media discourse on the topic.

Speech Visualization — make VR accessible beyond sound - Virginia Tech

May 2022

- Designed and developed a VR app in Unity to enable users, especially with hearing impairments to identify where the speaker is and what they are saying in a conversation through visual cues in mixed reality environment.

Habitat — finding flat at ease - Hackathon at Commvault Systems

Aug 2017

- Implemented a user-friendly web app to display posts/ads from Facebook groups suggesting city rental homes.

OTHER PROJECTS

Developed policy report for Mr. Ninong Ering's office (Member of Legislative Assembly, Arunachal Pradesh, India) on **Enhancing ed-tech adoption and effectiveness in India.**

Dec 2020