Samar Kansal

📞+1(826)202-0059 ✉ samarkansal@vt.edu 🔗 linkedin/samar-kansal ⭘ github/samar-kansal

EDUCATION

- **Virginia Tech** — Blacksburg, VA
  Master's in Computer Science GPA: 4/4 — Jan 2023 - Dec 2024 (Expected)
- **Birla Institute of Technology and Science, Pilani** — Hyderabad, India
  B.E.(Hons.) in Electronics and Communication GPA: 7.33/10 — Aug 2016 - July 2020

SKILLS & RELEVANT COURSEWORK

- **Programming Languages:** C/C++, Java, JavaScript, Kotlin, Python, SQL, PHP
- **Technologies & Frameworks:** React, Vue, Angular, Express, Node.js, MongoDB, MySQL, Selenium, Autogen, ServiceNow
- **Coursework:** AI Tools in Software Development, Software Engineering, Web App Dev, Mobile Dev, Data Structures and Algorithms, Operating Systems, Database Management System, Object Oriented Programming, Network Programming, Social Media Analytics

EXPERIENCE

• Virginia Tech — Blacksburg, VA
Software Developer (*Graduate Assistant*) - ***Division of IT*** — *Jan 2023 - Present*
- Optimized the Institute's loaning system by using MySQL wrappers and JavaScript scripts. Leveraged backend improvements to curtail email traffic, resulting in a notable 40% reduction in email notifications.
- Streamlined bulk request management with Angular UI, reducing clicks and administrative burden.
- Spearheaded the development and ongoing maintenance of Virginia Tech's centralized help portal.

• ServiceNow — Hyderabad, India
Software Engineer-2 — *Feb 2022 – Dec 2022*
- **Service Operation Workspace:** Engineered and optimized a high-performance user interface for a leading IT service management platform, integrating JavaScript, React, and GoJS to enhance the experience for millions of users and utilizing GlideRecord for robust MySQL database query handling.
- **Site Reliability Operations Application:** Created a full-stack application to facilitate SRE and DevOps team processes, integrating ServiceNow's scripting for server-side automation with a Seismic (React-based) front-end, and improved data management using GraphQL with MySQL.

Software Engineer-1 — *Aug 2020 – Feb 2022*
- **Notify:** Developed a notification system on ServiceNow, utilizing Java REST APIs for the deployment of SMS and voice alerts, which integrated with platforms like Zoom, Twilio, and Microsoft Teams, leveraging ServiceNow's Rhino JavaScript engine for server-side execution.
- **Problem Migration Utility:** Designed a JavaScript-powered application within ServiceNow, streamlining upgrades to an enhanced Problem Management version for customers.

• ServiceNow — Hyderabad, India
Software Developer Intern — *Jul 2019 - Dec 2019*
- **Incident Management:** Actively enhancing an ITSM app utilized by over 15,000 organizations. Executed feature development and contributed to app improvements.
- **Problem Management:** Designed and developed a workspace app to identify IT infrastructure errors and track bugs.
- **Automation and Unit Test:** Automated test cases for ITSM apps with JAVA selenium to detect regressions.

• AlphaICs — Bangalore, India
Software Developer Intern — *May 2019 - Jun 2019*
- Created custom OPs for TensorFlow with C++.
- Implemented parallel programming techniques with Molecular Dynamics by using the OpenMP library.
- Simulated Camera Module Interface in C for efficient image collection from multiple cameras with less memory usage.

PROJECTS

• Attendify (Meeting scheduler and QR based attendance management system) Recorded Demo Link
  Description: Attendify is a web-based application that allows event organizers to schedule and manage meetings, while attendees can use QR codes to check in and record their attendance. **Technology**: HTML, CSS, JavaScript, MongoDB, Express, Vue, Node, Pinia.

• Ducky (Coding Assistant)
  Description: Crafted an advanced AI-driven coding assistant in leveraging fine-tuned large language models, with AutoGen framework to ensure the generation of optimal code solutions.**Technology**: Open-source LLMs, Autogen, Python, Streamlit

• PADOS (Pickup and Drop Off Services)
  Description: A web application that connects travelers with people seeking transportation for themselves or goods. PADOS utilizes real-time Google APIs to provide accurate location-based services to both parties.
  Technology: HTML, CSS, JavaScript, MongoDB, Express, React/Redux, Node.

• Video Streaming Application - MPTCP
  Description: Developed an MPTCP-based video streaming application capable of serving multiple clients simultaneously. Designed a custom scheduler to effectively manage congestion control. **Technology**: Python, OpenCV, TCP/IP.