Siddarth Luthra

703-832-5691 | scz3zs@virginia.edu | linkedin.com/in/sidluthra1

Education

University of Virginia School of Engineering and Applied Sciences — Charlottesville, VA
Bachelor's of Science in Computer Science, Minor in Business Engineering — *Aug. 2023 – May 2027*

Technical Skills

Programming Proficient: Java, Python, MATLab, Arduino
Programming Competent: C++, Assembly
Software: Git, Github, Eclipse, JGrasp, VS Code, IntelliJ, Solidworks, MS Office, Autodesk Inventor
Hardware: 3D Printing, Laser Cutting, Speaker/Lighting Repair

Relevant Course Work

Data Structures and Algorithms II | *CS 3100* — Spring 2025
Software Development Essentials | *CS 3140* — Spring 2025
Computer Science and Organization I | *CS 2130* — Spring 2024

Course Projects

- Developed optimized driving directions by adapting Dijkstra's algorithm with priority queues to favor faster routes.
- Implemented a divide-and-conquer algorithm to efficiently distribute TA workloads by balancing shift weights.
- Designed a greedy scheduling algorithm to merge overlapping TA shifts, achieving optimal $\Theta(n \log n)$ complexity.
- Demonstrated proficiency in Java/Python, algorithm optimization, and handling large datasets under time constraints.

Work/Experience

Co-Founder and Head of Outreach — July 2024 - Current
Project Weekend — *Blacksburg, VA*
- Co-founded a company providing celebrity artists, lighting, and sound for college events.
- Lead client outreach, negotiations, and partnerships with event organizers.
- Develop marketing strategies to attract high-profile clients and expand reach.

Warehouse Manager and Business Analyst Intern — Summer 2024
ShiVish Entertainment and Total Multimedia — *Chantilly, VA*
- Implemented an inventory system reducing equipment loss and increasing efficiency.
- Collaborated with owners in customer service, financial management, and team leadership.
- Managed logistics for up to 12 events per weekend, coordinating equipment assignments, staff deployment and ensuring all event preparations are executed efficiently and seamlessly

Suspension Team Participant — September 2023 - May 2024
UVA Solar Car Club — *Charlottesvile, VA*
- Collaborated with the UVA Solar Car Club to dismantle legacy suspension systems and initiate CAD designs for new components.
- Leveraged CAD software to design innovative suspension components, driving enhancements in solar car performance and engineering precision.

SHAPE Engineering Student — Summer 2022
Columbia Univeristy — *New York, NY*
- Led a team in the design and construction of a robot from scratch, which successfully navigated a maze, located a lit candle, and extinguished it
- Applied SolidWorks and Arduino to design, prototype, build, and program the robot
- Worked in Columbia University's "Maker Space", utilizing 3D printers and laser cutters as essential tools for prototyping

Interests

AI, Prediction Models, DJing, Making Music, Business Development