Zaid Arsalan Salahuddin

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EDUCATION

Virginia Polytechnic Institute and State University | Blacksburg, VA   *2024 - 2028*
- College of Engineering – Data-Centric Computing, GPA: 3.47

SKILLS

Programming: Java, Python, Git/GitHub
Web: JavaScript, HTML/CSS, Bootstrap 5, JSON
Data Science & AI/ML: Pandas, Matplotlib, Scikit-learn, TensorFlow, BeautifulSoup, Playwright
Operating Systems: Windows, Linux, macOS
Tools: VS Code, Microsoft Office

PROJECTS

Class Availability Discord Bot   *Jul – Aug 2025*
- Built a Discord bot to help students track when an open spot appears in a class
- Utilized Python, BeautifulSoup, and Playwright to scrape data from an online timetable
- Saved user settings across restarts using JSON, with input validation and error handling

Machine Learning Research (IB Extended Essay)   *Jun 2023 - Mar 2024*
- Investigated the effect of different neural networks on a reinforcement learning model
- Worked with Python, TensorFlow and OpenAI environments to run multiple experiments
- Wrote a 4000-word report comparing the performance of the models

Data Analysis on Text Messages
- Made a program using Python to get statistics on SMS messages
- Worked with Pandas to clean up and organize original source data
- Utilized Matplotlib and Scikit-learn to analyze and create data visualizations

Eagle Scout Project   *Oct - Nov 2023*
- Planned the logistics to build picnic tables at a local school with over 90 volunteer hours
- Fundraised over $800 from the local community through word of mouth and social media
- Coordinated with 10+ volunteers over the course of 10 hours to execute the project

ACTIVITIES

GRAVT R&D Team (Gobble Rocketry at Virginia Tech)   *Sept 2024 – Apr 2025*
- Worked with YOLO model to track rocket position in a video frame

Boy Scouts of America (Assistant Senior Patrol Leader & Chaplains Aide)   *2016 - 2024*
- Organized weekly meetings for 30+ scouts
- Organized logistics for meetings, campouts, and outings

Science Olympiad   *Oct 2022 - May 2024*
- Worked with a range of subjects, including radio waves, robotics, geology, and Fermi Questions
- Studied topics and designed builds for both team and solo events within a few months
- Communicated with team members and leader to ensure research and builds were up to standard

Cyber Club   *Nov 2022 - May 2024*
- Worked with navigating and debugging Windows and Linux systems
- Collaborated with teammates to solve numerous cybersecurity puzzles in a limited timeframe

Other Activities:
- Virginia Tech Indonesian Student Association (Vice President)
- National Honor Society
- National Math Honor Society
- National Science Honor Society
- National Spanish Honor Society

AWARDS

IB Diploma - International Baccalaureate   *Jun 2024*
Eagle Scout - Boy Scouts of America   *Apr 2024*
Platinum Tier (Top 30%) - Air Force Association CyberPatriot   *Nov 2023*
Honorable Mention - Fairfax County Regional Science Fair: Sustainable Materials   *Mar 2021*