GOLSA HAFTSAVAR

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EDUCATION

Seeking Full-time new grad roles or M.S. Internships / Eligible for both roles

Virginia Tech • Blacksburg, VA

• B.S: May 2026 • MEng: May 2027

Dean's List, Engineering UTA + Math Department Tutor

- ***Bachelor of Science***: Computer Science
- ***Master of Engineering***: Computer Science
- ***Graduating one year early***

RELEVANT COURSE WORK

- Introduction Software Design, Software Design & Data Structures (Java), Intro to Problem Solving in CS (Python, SQL, HTML, Linux), Intro Computer Organization I & II (C/C++, x86_64, RISC-V Assembly), Data Structures and Algorithms (Java), Computer Systems (Assembly, C), Professionalism in Computing, Human-Computer Interaction, Theory of Algorithms
  - Minibash Shell (C, Tree-Sitter, POSIX)
    - Implemented a Bash subset supporting pipelines, redirection, variables, and job control, passing 100% of ~30 test cases including concurrency and process-control edge cases
    - Engineered a custom parser with Tree-Sitter and integrated fork/exec + signal management, strengthening systems-level debugging and process isolation skills

TECHNICAL SKILLS

- **Languages**: Java, Python, JavaScript, TypeScript, C++, SQL, HTML/CSS
- **Frameworks & Libraries**: React, Tailwind CSS, Flask, Streamlit, Node.js
- **Tools & Technologies**: Git, Firebase (Firestore/Auth), Google Cloud Platform (Cloud Run, Places API), REST APIs, WeasyPrint, Postman, MATLAB
- **Databases**: Firestore, PostgreSQL, MySQL
- **Concepts**: Data Structures & Algorithms, Object-Oriented Programming, Test-Driven Development, Multi-Agent Systems, Software Design Patterns
- **Other**: Agile Methodology, UI/UX Design, Debugging, Deployment, Cloud Hosting

EXPERIENCE

(Technical) Model Validation Expert (MOVE) Fellowship

Handshake – RLHF + Prompt Engineering (June 2025-Present)

- Evaluated and Refined high-quality prompt/response pairs for RLHF pipelines, reducing hallucination rates by 15% in internal evals
- Conducted structured manual evaluations and partnered with ML Ops to refine system outputs, improving alignment consistency across diverse prompts

(Technical) AI Trainer, Alignerr | RLHF + Prompt (May-August 2025)

- Built automated Python pipelines with OR-Tools + Z3, generating and scoring structured reasoning problems at 3× previous throughput
- Integrated solvers directly into feedback loops, reducing manual evaluation time by 40% while raising model reasoning accuracy

(Technical) Coding Contributor, Uber AI Scaled Solutions (July-August 2025)

- Delivered production-grade code, QA tests, and NLP contributions across domains (autonomous vehicles, generative AI, CV), using uTask/Testlab to meet strict quality benchmarks
- Ensured scalability and correctness of distributed work by collaborating asynchronously with 10+ engineers across global teams

(Technical/Leadership) Engineering Undergraduate Teaching Assistant

Virginia Tech (August 2024-May 2025)

- Taught Arduino programming, circuit debugging, and electronics safety to 160+ students, increasing lab proficiency and improving project completion by ~25%
- Provided live demos, graded projects, mentoring groups through semester-long technical projects

PROJECTS

Agent Development Kit Hackathon with Google Cloud (Competed Solo)

MediMind Clinical AI Assistant (June 2025)

- Delivered real-time clinical reasoning for 10+ patient scenarios, **reducing manual review time by 65%** by designing a multi-agent collaboration system for autonomous diagnosis
- Deployed on Streamlit + Firebase with geolocation and PDF generation, enabling **clinician-ready handoffs in under 1 minute**
- Built in 7 days, demonstrating rapid prototyping under time pressure with Vertex AI (Gemini Pro), Google Places API, and Cloud Run

GitHub Repo Assistant (LLM + LangChain + Python)

- Automated inline code review across 50+ files by integrating GPT-based static analysis, **reducing manual review time by ~30%**
- Added structured issue tagging for maintainers, increasing dev efficiency in large repositories

Arduino-Powered Digital Instrument (C/C++)

- Created a 14-note, 2-octave MIDI controller with **<50ms latency** and pitch accuracy within **±5Hz**
- Featured dual ultrasonic sensors for pitch and volume modulation

Smart Autoplay Music Player (Graphs, Hashing, Python app)

- Designed graph-based session manager with a voice assistant, linking 100+ song transitions.
- Improved playlist cohesion by 80% in user tests, enhancing Apple Music Autoplay mimicked behavior by dynamically updating recommendations mid-session

Personal Portfolio Website (HTML5, CSS3, JavaScript, GitHub Actions/Pages)

- Developed a fully responsive, mobile-first portfolio site showcasing projects and skills
- Integrated asynchronous form submission via Fetch API and GitHub Actions CI/CD for automated deployment
- Achieved 100/100 Lighthouse scores in performance accessibility + SEO

RESEARCH / ACADEMIC CONTRIBUTIONS

(Technical) ML-Powered User Interface Research Study

- Improved data quality and reducing facilitator re-prompts during collection by enabling faster annotation passes and clearer comparisons of communication modalities across conditions

(Technical) Multimodal Team-Performance Models for Assessing & Influencing Team-Dimension Competencies in VR

- Delivered structured qualitative notes on cue timing and interface affordances, accelerating iteration on training interventions and clarifying reliability checks

(Technical) Virtual Privacy Assistance Influence Research Study

- Flagged 5+ instances of ambiguous disclosure copy and UI control placement, leading to streamlined decision paths and 20% fewer clarification prompts in subsequent trials.

(Technical/Leadership) Hackathon – Thomas Jefferson HSST

- **Boosted study efficiency by 60% for 50+ students** by leading a team to design and implement a Pomodoro Study Helper web app with an efficiency tracker, for a 24-hour hackathon, using HTML, CSS, and JavaScript

(Technical) Bio Code Competition – Thomas Jefferson HSST

- Designed Python-based algorithms for real-time clinical decision logic under competitive time constraints, improving accuracy of medical scenario simulations by 15%

(Technical/Leadership) Mentor – CS & Cybersecurity Club

- Guided **30+ underclassmen** in API/database integration, debugging, and backend design, improving project completion rate by **40%** through technical walkthroughs and collaborative coding