Ankur Gyawali

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Education

Howard University

B.S. in Computer Science, GPA: 3.97/4.0

Graduation Date: May 2026
Washington, DC

• Coursework: Probability & Statistics, Applied Data Science, Database Systems, NLP, Software Engineering, Operating Systems, Cloud Computing, Theory of Computation, Data Structures & Algorithms, Computer Networks, Cybersecurity

• Honors & Awards: Dean's List, Google Capacity Scholar, DOW SURE Scholar, HU Founders Scholarship

Technical Skills

- Languages: Python, TypeScript/JavaScript, SQL, Java, C/C++, MATLAB, HTML/CSS
- Frameworks/Tools: React, React Native, Next.js, Flask, OpenAI, Azure, spaCy, Ollama, Azure Cognitive Search, Docker, Jenkins, Git/GitHub, AWS, OpenCV, Figma, Confluence, JIRA, Linux (KVM/VM), RESTful APIs, GCP

Work Experience

Software Engineering Intern

May 2025 - Aug 2025

 $Dell\ Technologies$

 $Round\ Rock,\ TX$

- Engineered an end-to-end **Python** automation pipeline to correlate CPU usage across PowerStore builds, reducing multi-hour manual log reviews to **30 seconds** and enabling rapid triage of performance regressions.
- Architected N-ary task trees to attribute CPU usage per subtree, providing granular performance insights across 10+ concurrent builds and improving regression detection accuracy.
- Developed a **JavaScript dashboard** with test-driven components, integrating **Selenium** automated testing to boost anomaly detection efficiency by 90% for engineering teams.

Research Assistant May 2024 - May 2025

Howard University

Washington, DC

- Created a hybrid experimental—computational model integrating BioFlux microfluidic data with COMSOL MATLAB simulations to predict cellular adhesion under shear stress, improving model accuracy by 30%.
- Applied **polynomial regression** analysis to characterize shear stress-adhesion dynamics, enabling reliable forecasting of cellular attachment behavior and supporting future research in disease modeling & drug testing.

Software Engineering Intern

May 2024 - Aug 2024

Dell Technologies

Hopkinton, MA

Washington, DC

- Developed a comprehensive Python CLI tool for automated diagnostic log analysis, reducing manual troubleshooting effort by 50% through optimized parsing algorithms and data visualization.
- Refactored legacy codebases and implemented unit testing with **Jenkins CI/CD pipelines**, increasing tool reliability by **25%** and enabling continuous deployment workflows.

STEM Intern

Jul 2023 - Aug 2023

• Led hands-on workshops and mentored **100**+ students in 3D modeling using Tinkercad and Python.

• Designed interactive AR/VR learning modules via CoSpaces.io, increasing student engagement by 25%.

Projects

Tech TurnUp

Application Tracker | Personal Project

Feb 2024 - Present

- Developed an intelligent AI agent using spaCy + Ollama LLM pipeline with Google Cloud Platform(GCP) OAuth2 integration to intelligently categorize job application emails, achieving 30% improved accuracy on edge cases.
- Implemented **LLM** fallback system (Ollama Llama 3.1) for ambiguous email classification, improving parsing accuracy by **30%** with encrypted token storage & idempotent database operations, **SHA-256** de-duplication.

Lifeline Buddy: AI Emergency Dispatch System | Hackathon

Mar 2025

- Built a voice-enabled AI dispatch agent to support 240M+ annual 911 calls, autonomously triaging emergencies, cutting response times by 80% & ensuring 100% coverage when human operators were unavailable.
- Designed a real-time pipeline (Flask, Socket.IO, MongoDB, React) with Gemini LLM & ElevenLabs for sub-second voice triage, streaming live transcripts, severity scores, & unit recommendations across 50+ concurrent sessions.

BisonBytes Chatbot | Hackathon (2nd Overall, 3rd AI/ML Track) YouTube

Mar 2024

- Built an **AI** chatbot agent using **Azure Cognitive Search** and **OpenAI API**, giving students instant access to accurate campus information and improving accessibility for prospective applicants.
- Applied Retrieval-Augmented Generation (RAG) architecture to deliver contextually relevant answers in under 5 seconds, significantly enhancing user experience and information accessibility.

Leadership & Activities

• Bloomberg Bpuzzled Global Competition - Finalist	Mar 2025
• Dell Technologies Campus Ambassador	Aug 2024

• TMCF MetaScholars Program Participant

Apr 2024

• Goldman Sachs Market Madness: HBCU Possibilities Program

Feb 2024

• Tech for Change Club, Howard Chapter - President

Aug 2023

• NASA Goddard Space Flight Center - Bison Externship

May 2023