Harlan Phillips

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EDUCATION

University of California, Berkeley – Berkeley, CA — May 2027
Bachelor of Science in Electrical Engineering & Computer Science

Bakersfield College – Bakersfield, CA — May 2024
Associate of Science in Computer Science, Mathematics, & Physics GPA: 4.0
Relevant coursework: Data Structures, Object Oriented Programming, Computer Architecture, Linear Algebra
Honors & Awards: OSHER Scholar (~1%), Phi Theta Kappa Honor Society, Dean's List

SKILLS

- **Programming Languages:** Go, Dart, Bash, SQL, C++, Java, JavaScript, TypeScript, Python, Kotlin, Assembly, SQL
- **Technologies & Tools:** React, Node.js, Android Studio, TensorFlow, Docker, AWS, Git, Unix/Linux, Shell Scripting, Flask

EXPERIENCE

Cliffco Mortgage Bankers - R&D Technical Director | Long Island, NY — Nov 2024 - Present
- Architecting mobile app using Flutter and Go microservices, integrating an LLM for intelligent diagnostics and solutions
- Engineered high-performance backend implementing WebSockets and NATS messaging system, reducing API response time by 83% (6s to <1s) and vendor query time by 75% (60s to <15s)
- Designed infrastructure including Redis caching system and PostgreSQL database within Docker containerized environment
- Leading cross-functional team of 4, while reducing department costs by 30% through strategic talent acquisition

Blue Marble Space - Software Lead | Remote — Jan 2025 - Present
- Building Python ML/AI backend for scientific data curation, integrating Langchain, MCP, and Weaviate for NASA's Open Science Data Repository
- Implemented vector database with embeddings, reduced data processing latency by over 75% with concurrency
- Developed E2E system including React components, user authentication, and file storage for scientific experiments
- Leading a team of NASA engineers to design a system for transforming unstructured scientific data into standardized JSON with contextual metadata

Cornell University - Machine Learning & Software Engineering Intern | Ithaca, NY — June 2024 - August 2025
- Applied ML and information retrieval techniques by building a CNN/LSTM model, increasing classification accuracy by 60%
- Designed and implemented a Flask web app for data visualization using SQL and JavaScript, reducing data processing time

NASA Johnson Space Center - Computer & Software Engineering Intern | Houston, TX — August 2024 - Nov 2024
- Developed lunar surface communication systems between spacesuits utilizing TypeScript and WebRTC-based technology
- Streamlined data processing and reduced setup time by 80% by developing GUIs using Node.js and JavaScript
- Optimized field systems on SBCs using protocols such as 3GPP, LTE, WiFi 5/6, with Unix/Shell scripting

NASA Ames Research Center - Data Science Intern | Mountain View, CA — June 2023 – May 2024
- Engineered a Langchain-based LLM tool automating research visualization, cutting process time from 2 hours to 2 minutes
- Enhanced data processing and visualization accuracy by 95% through creating Python automation scripts

PROJECTS

Culina - CTO | Demo — Jan 2025 - Present
- Leading engineers from Google and Amazon to create an inventory management system for restaurants
- Devops and security management
- Received $60,000 in initial investment and landed 25 clients

Interstellar Automated Visualizer (IAV) - NASA Global Space Apps | Youtube — October 2024
- Top 40 global finalist out of 9,900 participants
- Designed a scalable visualization tool using Python, React, Plotly, and Langchain, to process and display data dynamically for NASA's biological spaceflight experiments, deployed using google cloud

AWARDS

Y Combinator — March 2025
- Recognized as top 10% on Startup School (YC X25 batch)

NASA Shining Star Intern | Mountain View, CA — July 2023
- Selected as 1 of 4 interns from 1,200 participants nationwide, recognized for exceptional performance and contributions to scientific and technological advancements during my internship at NASA