Harlan Phillips

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EDUCATION

University of California, Berkeley – Berkeley, CA   May 2027
Bachelor of Science in Electrical Engineering & Computer Science
Relevant coursework: Data Structures, Object Oriented Programming, Computer Architecture, Linear Algebra

Bakersfield College – Bakersfield, CA   May 2024
Associate of Science in Computer Science, Mathematics, & Physics GPA: 4.0
Honors & Awards: OSHER Scholar (~1%), Phi Theta Kappa Honor Society, Dean's List

SKILLS & CERTIFICATIONS

- **Programming Languages:** C#, Python, C++, C, JavaScript (Node.js), React, Java, Kotlin, Assembly, SQL
- **Technologies & Tools:** Plotly, Langchain, Tensorflow, Dash, Matplotlib, Git, Docker, AWS, Jupyter, Flask, Unix/Shell Scripting
- **Certifications**: CodePath Android Development (02/2024 - 05/2024), Harvard's Machine Learning/Data Science with Python (08/2023 - 11/2023), SANS Foundations: Computers, Technology, & Security (06/2022 - 10/2022)

EXPERIENCE

NASA Johnson Space Center - Software Engineering Intern | Houston, TX   August 2024 - Present
- Developed GUIs using Node.js and JavaScript, streamlining data processing and reducing setup time by 80%
- Integrated VN-200 GNSS/INS with LattePanda Sigma SBC using Linux, enhancing data capture speed by 1.5x
- Optimized field systems on SBCs using protocols such as 3GPP, LTE, WiFi 5/6, with Unix/Shell scripting
- Debugged software systems, resolving 20+ issues with bash scripts, GUI bugs, and database errors

Cornell University - Machine Learning & Software Engineering Intern | Ithaca, NY   June 2024 - Present
- Built and deployed a CNN & LSTM machine learning model, enhancing classification accuracy by 60%
- Designed and implemented a Flask web app for data visualization using SQL and JavaScript, reducing data processing time
- Managed AWS EC2 DevOps for the project, achieving 99.9% uptime with continuous integration and delivery (CI/CD)

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
- Collaborated with cross-functional teams, delivering automation solutions for scientific experiments
- Created Python automation scripts to enhance data processing and visualization accuracy by 95%

Bureau of Land Management - Engineering Intern | Bakersfield, CA   August 2023 – October 2023
- Improved counting algorithm accuracy from 41% to 99%, optimizing resource allocation and cost savings
- Calibrated infrared and magnetic counter technologies, increasing data reliability by 25%

PROJECTS

Interstellar Automated Visualizer (IAV) - NASA Global Space Apps | Youtube | Website   October 2024
- Designed a scalable visualization tool using Python, React, Plotly, and Langchain, to process and display data dynamically for NASA's biological spaceflight experiments
- Integrated AI chatbot leveraging Langchain Transformers for real-time assistance and contextual understanding of visualizations

Kern Medical System Automation - Backend Lead | GitHub   August 2023 - May 2024
- Engineered Django-based databases to optimize check-in times and automated report generation, improving efficiency by 50%

Alara - Virtual Personal Trainer | GitHub   April 2024
- Utilized computer vision and AI technologies to develop an interactive interface with OpenCV, Reflex, and Gemini AI

LEADERSHIP & AWARDS

Code Path | Tech Fellow | Remote   May 2024 – August 2024
- Facilitated technical training sessions, improving students' understanding of software development principles

Bakersfield College's Code Society | Founder | Bakersfield, CA   August 2023 – May 2024
- Founded the society to inspire computer science students, fundraising $10,000 for events and projects
- Partnered with Kern Medical for student-led projects, including system automation and healthcare software solutions

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