Thakia Waksanga

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Summary

Aspiring computer science professional with externship experience in software engineering and data analytics at Beats by Dre, enhancing analysis efficiency by 30% using Python and NLP. Contributed to strategies at NVIDIA Ignite with technical expertise in GPU technologies, impacting product direction through data insights. Aims to leverage analytical skills and innovative thinking to drive technological advancements in a dynamic team environment.

EDUCATION

University of Pennsylvania   **Aug 2023 - Present**
Bachelors of Engineering, Computer Science
- **Coursework:** Data Structures and Algorithms, Programming languages, Web systems, Embedded Software , web systems, web development, computer systems

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, OCaml, SQL, HTML, JavaScript, C++, css
- **Soft Skills:** Collaboration & Teamwork, Problem-Solving, Critical thinking
- **Tools/ Platforms:** MS Modules, Atlassian Jira, Microsoft suite, Github, Figma, Mongodb, git
- **Interests:** Reading, Investing, App development, Robotics, Basketball

PROFESSIONAL EXPERIENCE

Beats by Dre — Software Engineering Extern (Data Analytics)   **May 2025 - Aug 2025**
Software Engineering & Data Analytics Externship
- Utilized quantitative methods and qualitative insights on user data, and built Python pipelines with NLP and AI APIs to process over 50 GB of customer data, improving analysis efficiency by 30%
- Applied sentiment analysis using Hugging Face and Tableau on 2 million+ data points, uncovering 5 key trends that directly informed product strategy.

NVIDIA Ignite Summer Bridge   **Jun 2024 - Aug 2024**
Bridge Cohort Member – Software Engineering Pathway
- Selected for a competitive cohort of 100 students globally to explore software engineering and innovation at NVIDIA.
- Gained hands-on training in technical interviewing, parallel computing, and GPU technologies through weekly mentorship and technical talks with NVIDIA engineers.

Hexakomb Software Engineering Intern   **Mar 2023 - Jul 2023**
Software Engineering - Intern
- Improved performance of 2 client web apps, cutting load times by 15% through debugging and updates.
- Contributed to a mobile-first redesign, boosting daily active users by 20% and Built RESTful APIs and 30+ unit tests, reducing deployment bugs.

EXTRACURRICULAR AND LEADERSHIP EXPERIENCE

National Society of Black Engineers (NSBE) | *International Liaison*
- Researched and built a network of Penn Engineering alumni through the society, leveraging these connections to bring in experienced speakers and mentors for career development events, expanding the society's professional network.

Advancing Women in Engineering | *STEM Outreach Fellow*
- Develop and support initiatives to increase the number of women interested in engineering in Central high school philadelphia.

Penn World Scholar | *Scholar Fellow*
- Selected as 1 of ~30 global scholars from 2000+ Penn students to research international policy, leadership, and global citizenship.

PROJECTS

RESCUE ME: Autonomous Irrigation System for Home Use
team4tech
- Collaborative project with team4tech(Team of 3)
- Designed and implemented an automated irrigation system using Arduino microcontrollers to monitor soil moisture and control water flow, for three families and Programmed sensors and actuators to optimize water usage

Maze Solver (Java, BFS & Custom Deque)
- Designed a grid-based maze solver in Java that computes the shortest path using Breadth-First Search (BFS).
- Optimized traversal to handle mazes of up to 10,000+ cells, ensuring efficiency and correctness through rigorous unit testing.