Abdelrahman Qamhia

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EDUCATION

Lehigh University, Bethlehem, PA	Graduation: May 2025
Bachelor of Science in Computer Engineering	**GPA: 3.70	Major GPA: 3.87**

Honors: IEEE Honor Society (HKN), Frank Williams Scholarship, Dean's List, KL-YES Exchange Program Awardee

INTERNSHIP EXPERIENCE

Prompt Engineer/UX Designer Intern   May 2024 – Aug 2024
WEHEAD, San Francisco, CA
- Developed voice-controlled music playback, integrating NLP and speech recognition APIs for WEHEAD devices
- Created and fine-tuned **15+ AI avatars**, increasing NLP response accuracy and improving overall user interaction
- Designed web-based user interfaces, utilizing **Azure/OpenAI API** for streamlined avatar and system control
- Conducted A/B tests on conversational AI, optimizing **UX by 25%** with feedback-driven iterative improvements

RELATED EXPERIENCE

Grader, Web Systems Programming   Aug 2024 – Present
Prof. Dominic DeFranzo, Lehigh University, Bethlehem, PA
- Assessed **50+ projects weekly**, providing in-depth feedback on full-stack web apps to enhance student learning
- Mentored **50+ students** in debugging and optimizing applications using Node.js, Express.js, React, and MongoDB

Teaching Assistant, Applied Engineering and Robotics   Aug 2022 – May 2023
Prof. George Witmer, Lehigh University, Bethlehem, PA
- Supervised lab sessions and held office hours for **up to 50 students**, focusing on troubleshooting technical issues
- Managed weekly maintenance of **45+ robots**, ensuring functionality and assisting students with technical problems
- Designed hands-on demonstrations, focusing on real-world applications of embedded systems and robotics theory

Technology and Computer Specialist, West Bank   Apr 2020 – Apr 2021
Nabtech Technology and Protection Systems
- Provided technical support for custom PC builds, network setup, and software issues for **20+ customers daily**
- Diagnosed and resolved driver conflicts, malware removal, and hardware issues, improving system performance
- Expanded client base by **100+** through digital marketing, offering personalized solutions for tech support needs
- Increased **5-star company rating by 50%** by consistently following up with clients to ensure satisfaction

RESEARCH / PROJECT EXPERIENCE

Chess Board Learning System | Capstone Project   August 2024 – Present
- Developed a smart chess board system, utilizing square indexing techniques to interface seamlessly with a digital chess engine, simplifying the electrical design and improving reliability
- Implemented system software to interpret chess board states, dynamically generating game analysis and visually indicating suggested moves on the board through LED signals

Lehigh University Chat App | React JS & Google Firebase   August 2024 – Present
- Developed a **real-time chat app**, featuring secure login, friend management, and blocking functionality
- Enabled instant messaging, image sharing, and emoji support to enhance user interactions and engagement
- Proposed to make the app the primary communication tool for Resident Assistants to conduct regular check-ins and support student well-being throughout the semester

Student Project Manager at Restored, West Bank   Jan 2020 – Apr 2020
- Raised **$15,000** to install solar panels for **30+ households** in a remote village, improving their quality of life
- Applied agile project management to accelerate the project timeline from **six months to three months**

TECHNICAL SKILLS

Programming Languages: Java, HTML, CSS, JavaScript, Python, SQL, C/C++, MIPS Assembly, Verilog
Frameworks/Libraries: React, Node.js, Express.js, Material-UI, Pandas, NumPy, Matplotlib, jQuery, Bootstrap
Other Tools: Git, Docker, VS Code, Dokku, Postman, npm, Linux, LaTeX, MongoDB
Languages: English (Native), Arabic (Native)
Related Coursework: Operating System Design, Network and System Administration, Software Engineering, Web Systems Programming, Computer Architecture, Systems Software, Electronic Circuits, FPGA Development, Microcontroller Development, Signals & Systems, Digital Logic Design, Medical Electronics, Data Structures & Algorithms