Khang Vu

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EDUCATION

University of North Carolina at Charlotte **December 2022**
B. S. in Computer Engineering, Minor in Mathematics ***Cumulative* GPA**: 3.63/4.00
Related coursework: Data Structures and Algorithms, Machine Learning, Embedded Systems, Computer Organization, Digital Signal Processing, Data Communications and Networking, Robotics, VLSI Systems Design, Project Management, Critical Thinking & Communications, Calculus I-III.
Honors and Awards: Cum Laude, Chancellor's List, Dean's List.
Certifications: freeCodeCamp Responsive Web Design.

SKILLS

Languages: C++, Python, JavaScript, HTML/CSS.
Technologies: NI Multisim, Cadence, Google Colab, AutoCAD, MATLAB, Microsoft Office (Excel, PowerPoint).

PROFESSIONAL EXPERIENCE

myVANTOOL | Co-Inventor **May 2021 – Present**
- Design and assess the electrical circuit and components in carpet cleaning sprayers/tools.
- Test and analyze prototypes to assess performance, functionality, and user experience.
- Manage the collection and execution of orders placed through our website in a timely manner.
- Generated over $35,000 in sales within the first 6 months of launch.

Pi Alpha Phi | President **January 2020 – December 2020**
- Led general business meetings with 30 active members on a weekly basis.
- Communicated directly and held meetings with national board and office of fraternity and sorority life.
- Mentored board of six other executive officers and provided support for their duties as needed.

PROJECTS

3D Hand Gesture Interfacing | Schweitzer Engineering Laboratories **January 2022 – December 2022**
- Effectively communicated with industry supporters, mentors, and project team using strong verbal, written, and listening skills as Project Lead.
- Designed various sensor configurations that will allow users to interact with devices using gestures in 3D space.
- Conducted 10 tests with company employees to provide data-driven design recommendations based on the overall effectiveness of 3D gestures and any obstacles encountered by participants.
- Achieved 66% reduced time on task compared to initial testing through code optimization.
- Achieved 77% effectiveness by company participants.

Printed Circuit Board Design and Analysis **August 2021 - December 2021**
- Designed and implemented printed circuit boards, switching converters, and application specific firmware structures.
- Conducted appropriate experimentation of printed circuit boards to interpret and analyze data.

Steam Generator Transporter **August 2018 - December 2018**
- Spearheaded programming a RedBoard in Arduino language to output the most optimal time and velocity to the wheel motor considering the maximum allowed value of watts.
- Created Excel H-Beam Calculator that computes the cross-sectional area, volume, mass, moment of inertia, and deflection for different types of beams considering the load, overall dimensions, flange dimensions, web dimensions, modulus of elasticity of beam material, and density of beam material.