Guanchao Huang (Samuel)

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OBJECTIVE

Develop software product that empowers people. Proven development and product/project management skills demonstrated in 5+ high-impact projects, with a track record of quickly adapting to new domains and technologies.

EDUCATION

UNIVERSITY OF NOTRE DAME (ND)

Notre Dame, IN

Master of Science in Computer Science and Engineering | GPA 3.722/4.000

Aug. 2023 – May 2025

SOUTHERN UNIV. OF SCI. & TECH. (SUSTECH)

Shenzhen, Guangdong, China

Bachelor of Engineering in Microelectronics Science and Engineering | GPA 3.69/4.00 Sep. 2019 – Jun. 2023

EXPERIENCE

IDEA CENTER, ND

Notre Dame, IN

Project Manager

September 2024 – October 2024

• Facilitated an ND alumni founder towards securing a \$50k paid beta program for a clinic triage software.

KINGA SAFETY

South Bend, IN

Product Manager & Software Engineer

July 2024 - October 2024

- Conducted code reviews for existing codebase, leading to the decision to onboard a new developer; sourced and interviewed new developer, and provided technical insights for the team.
- Re-developing Kinga with React Native. Kinga is a personal safety app with features like decoy call and emergency texts. Served as Product Manager to ensure the development aligns with business needs.

ENFOCUS

South Bend, IN

Summer Intern - Tech Consulting, Data Analytics

May 2024 - July 2024

- Contributed to the **Connected Vehicle Pilot Program** of **THOR INDUSTRIES** as a primary project.
- Analyzed real-time trip data from 800+ users collected over the past 4 months, including GPS telemetry, demographics, treatment impact, and survey results. Delivered insights to inform future protocol design and recommended the creation of an in-house data science team.
- Developed a 12-page real-time dashboard using PowerBI, ArcGIS, and Azure to monitor user performance in the program. The dashboard provided key insights for the pilot program and received client endorsement.

BLEWBO

Shenzhen & Dongguan, Guangdong, China

Market Research Engineer - Business Development & Operation

June 2023 – September 2023

- Pioneered Blewbo's business expansion into the Chinese market as the **first employee**, directly handling all aspects of business development and setting the foundation for the company's operations in the region.
- Facilitated business communication during the executive's travel in China, acting as an interpreter and ensuring smooth business operations through cultural and strategic insights.
- Conducted supplier sourcing by identifying and finalizing business agreements with 4 factories.
- Operated the hiring process for the China launch, posting jobs, screening applicants, and coordinating interviews, ultimately recruited a Product Photographer and an HR Specialist from over 150 candidates.

COOPERATIVE COMPUTING LAB, ND

Notre Dame, IN

Visiting Student Researcher – Software Engineering

May 2022 – Jul 2022

- Collaborated with CCL research team, enhancing the open-source HPC computing toolkit using C and Python. Utilized Git and GitHub for version control, and Linux Shell script to streamline workflow.
- Developed a transaction log visualization tool with Python that diagnosed performance bottlenecks in the distributed computing system, which became an integral tool for subsequent research projects.
- Implemented a mechanism to reduce the number of distributed workers without compromising task progress, resolving a long-standing functional request from 2016 and optimizing the system's flexibility and efficiency.

ENTREPRENEURSHIP

- **Software Engineer** at **TALENTOS UNIDOS**: Building a web app with a WhatsApp chatbot to collect job seeker info and a frontend for HR to filter the candidates. Used Twilio, Node.js, MongoDB, React.
- IT Advisor at ECOGRAINS ENERGY: Recommended website-building solutions and managed IT tools, including Google Workspace and Notion, to enhance team productivity. Managed social media presence.

ACADEMIC & PERSONAL PROJECTS

- Hexagram: A React-based web tool for exploring and interpreting the 64 Chinese hexagrams. (August 2024).
- Wildlife Monitoring with Raspberry Pi: Led a 2-student team to build a system using motion sensor and webcam to detect animals, send push notifications to iPhone, and store images on Google Drive (May 2024).
- Compiler for B-Minor: A compiler for B-Minor 2023, a C-like language that includes expressions, basic control flow, recursive functions, and strict type checking, crafted in C for Intel x86 platform. (December 2023)
- <u>UniTuring</u>: A Python-based UTM emulator capable of reading and executing computations on provided
 Turing machine tapes, complemented by a text interface that showcases the execution progression. (April 2022)
- ARMv3 Processor with Multiplier: A processor written in Verilog, compatible with several basic ARMv3 arithmetic instructions and multi-cycle multiplication, simulated and tested in Vivado. (October 2021)
- <u>Image Steganography + Hamming Codec</u>: Led a 2-student team in developing a Python tool for data embedding within images with Hamming encoding/decoding and LSB manipulation. (May 2021)
- Matrix Library and Strassen Algorithm: Led a 4-student team in developing a custom Python matrix library, incorporating basic operations and the Strassen multiplication algorithm. (December 2020)

OPEN SOURCE

Core Team Member of NexT, a popular theme for the Hexo static site generator with over 26k stars across three repositories. Developed and maintained key features; my personal website is built using this theme.

LEADERSHIP & SERVICE

UNIVERSITY OF NOTRE DAME

Recruiting Assistant | Dept. Representative | ACM Chapter Chair

Notre Dame, IN 2023 – 2024

- Student Recruiter: Initiated the Ambassador Program in the College of Engineering, collaborating with admission office to establish a trained ambassador team. Recruited for grad school at multiple conferences.
- Dept. Representative, Grad. Student Gov.: Represented CSE Dept. in GSG meetings.
- Interim Chair, ACM Student Chapter: Reviving the organization to promote professional development and increase CSE student engagement in campus startups, coordinating events and partnerships.

SOUTHERN UNIV. OF SCI. AND TECH. (SUSTECH)

Shenzhen, Guangdong, China

Founder & Moderator | Peer-mentor | Student President | Office Student Assistant

2020 - 2023

- Founder and Moderator of Python User Group: Improved technical skills and problem-solving abilities for 350+ members. Additional workshops are currently being planned.
- **Peer Mentor of Zhiren College:** Served as mentor for 40 first-year undergraduate students.
- Student President of School of Microelectronics: Organized events, assisted administration.
- Member of Feng Hua Emcee Team: Emceed/provided voice-overs for 15+ campus events.

SKILLS AND AWARDS

Certificates: Earned 40+ online course certificates; Google Project Management Professional Certificate; Deep Learning Specialization Certificate from DeepLearning.AI.

Technical Skills: Python (4 yrs); C (3 yrs); Java (2 yrs); Linux and Git (4 yrs); Node.js and React (1 yr)

Hobbies: Singing (Tenor 1 in Notre Dame Chorale); Classical Music; Philosophy; Psychology; Productivity