Derick Shi

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www.linkedin.com/in/derick-shi-real | 51640 Sandelwood Ct, Granger, Indiana (Willing to relocate)

EDUCATION

University of Notre Dame Notre Dame, IN 46556 *May 2027*
Bachelor of Science GPA: 3.85
Majors: **Computer Science** and **ACMS** (Applied Computational Mathematics and Statistics) Dean's List 2023
Minor: **Engineering Corporate Practice**

PROJECTS

Riverbend Community Math Center Website *October 2023 - December 2023*
- Implemented a note frequency detector, various number games, and piano key player on their activities webpage utilizing HTML, Javascript, and CSS to improve engagement among middle school students.

PwC STEM Consulting | Student International Business Council *January 2024 - April 2024*
- Analyzed cyber insurance market trends and past claim data for an arbitrary cyber insurance company to provide strategic insights and recommendations for growth using Python, Matlab, and Pandas library.
- Delivered comprehensive insights encompassing the client's expansion strategy and risk mitigation approach in light of emerging challenges such as nation-state cyberattacks.

Medical Deep Learning Image Analysis App *May 2024 - June 2024*
- Developed deep learning models using YOLOv8 to classify and construct bounding boxes on medical images
- Utilized a Streamlit frontend framework to construct an interactive web app displaying results with Python scripts

WORK/RESEARCH EXPERIENCE

Retail Banking Intern | Notre Dame Federal Credit Union *July 2024 - August 2024*
- Analyzed loan data with Pandas library on Jupyter notebooks to identify market growth potential and processed 100+ financial transactions daily with CuBase software, ensuring data accuracy and compliance

Campus Bike Connect Start-up Co-Founder | IDEA Center Notre Dame, IN 46556 *March 2024 - Present*
- Launching a bike sharing solution using smart locks powered with Arduino and developing React frontend
- Prototyping physical locks that integrates digital user interaction with Fusion 360 constructed casing

Undergraduate Research Assistant | Notre Dame Computer Vision Research Lab *October 2023 - May 2024*
- Constructed custom machine learning models utilizing YOLOv5 framework to analyze and process extensive video datasets, generating CSV files optimized for future training purposes.
- Employed Label Studio to meticulously validate and refine output data, ensuring precision in object classification

Consulting Intern | Lucy Family Institute for Data & Society Civic Innovation Lab *June 2022 - July 2022*
- Researched and explored four potential solutions to reduce a $70,000 appraisal gap for Habitat for Humanity.
- Developed surveys to discern homeowner interests and compiled a detailed analysis in a white paper.
- Presented findings to the St. Joseph County Habitat Board of Directors

EXTRACURRICULARS/ACTIVITIES

Visa Upskill Tech Pathways Attendee *June 2024 - August 2024*
- Acquired technical interview skills and gained insights into the operations of fintech companies like Visa

SIG (Susquehanna International Group) Freshman Discovery Day Attendee *February 2024*
- Attended a webinar that introduced fundamental market concepts and quantitative trading strategies

Math Academic Super Bowl Captain *2019 - 2023*
- Spearheaded the state finalist team at the Indiana Academic Super Bowl State Competition

Mathcounts Head Coach | Discovery Middle School 10050 Brummitt Rd, Granger, IN 46530 *2019 - 2023*
- Prepared and presented over 20 lessons on a variety of Mathcounts competition topics.
- Provided over 300 total hours of active presentations and tutelage to over 60 students.

TECHNICAL SKILLS

Proficient Skills: Python, C++, Excel   **Familiar Skills:** JavaScript, HTML, CSS, MySQL, Matlab, Jupyter Notebook

Framework/Libraries: Pandas, Seaborn, Node.js, React.js, Streamlit, Django

PCEP – Certified Entry-Level Python Programmer certification   AIME: 6 / Putnam Score: 9