Derick Shi

Incoming **Amazon** SDE Intern for Summer 2025 | dericks1real@gmail.com
574-327-5829 | U.S. Citizen | www.linkedin.com/in/derick-shi-real | Granger, Indiana

EDUCATION

University of Notre Dame Notre Dame, IN 46556 *May 2027*
Bachelor of Science GPA: 3.81
Majors: **Computer Science** and **ACMS** (Applied Computational Mathematics and Statistics) Dean's List 2023
Minors: Engineering Corporate Practice
Relevant Courses: **Computer Architecture, Theory of Computing, Programming Paradigms**

PROJECTS

London Study Abroad: EE 24235 Engineering of Photography, EG 44175 Tech Ethics *May 2024 - June 2024*
- Developed a full stack medical image detection application with 89.1% accuracy utilizing deep learning models with YOLOv8 framework to classify and construct bounding boxes on data sourced from kaggle API
- Utilized a Streamlit frontend framework to construct an interactive web app displaying results with Python scripts

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.

Distracted Driver Recognition *August 2022*
- Developed a recognition software achieving 93% accuracy in python with machine learning algorithms and models such as CNN, and packages like Tensorflow to detect distracted drivers out of an image dataset.

WORK/RESEARCH EXPERIENCE

Campus Bike Connect Start-up Co-Founder | IDEA Center Notre Dame *March 2024 - Present*
- Launching a bike sharing solution using smart locks powered with Arduino and developing an Expo frontend that interfaces with a Flask backend and MangoDB database to enable remote bike lock unlocking and tracking
- Accepted in the IDEA Center Pre-Accelerator (Top 10% of startups) for additional funding and business support

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

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 100+ GB video dataset in order to generate CSV files optimized for future training purposes.
- Validated and refine video output data with Label Studio, 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.
- Presented findings and analysis in a white paper to the St. Joseph County Habitat Board of Directors

EXTRACURRICULARS/ACTIVITIES

Chinese Cultural Society Co-Treasurer *August 2024 - Present*
- Managing a yearly budget of over $10,000 and communicating strategic goals to a club of over 170 members
- Developed interactive website with React to manage finances and streamline club management tasks

Visa Fintech Foundations | San Francisco, California *October 2024 - January 2025*
- Investigated implementation strategies of central bank digital currencies utilizing a blockchain network
- Introduced adoption methods for a U.S. market to Visa's Chief Strategy Officer and other directors.

Akuna Capital Options 101 Course December 2024 - January 2025
- Analyzed and predicted financial derivatives based on various Greeks and other trading indicators

TECHNICAL SKILLS

Languages/Skills: Python, C++, Excel, Java, JavaScript, HTML, CSS, SQL, Matlab, Jupyter Notebook, Git, Pandas, REST API, Numpy, Fusion 360, Seaborn, Node.js, React.js, Express.js, Streamlit, Django, Expo, MangoDB