## Rex Stayer-Suprick

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#### Education

#### University of Notre Dame

B.S, Computer Science

Notre Dame, IN

Fall 2021 – May 2025

- GPA: 3.83
- Study Abroad College of St. Andrews in Scotland, Fall 2023
- Found, lead, and coordinate the layout and graphic design for campus art magazine SPARE.

# **University of Notre Dame**

Notre Dame, IN

M.S, Computer Science

Fall 2025 - May 2026

## **Professional Experience**

**Rockwell Automation** 

Milwaukee, WI

Software Engineer and Architect, Intern

Summer 2024

- Develop a **mobile application**'s front and back-end codebase from scratch with .NET, **XAML**, and **C#** to communicate with proprietary ethernet devices over industrial transport protocols.
- Leverage .NET resources and full-stack development to create modular and robust back-end solutions.
- Communicate with scrum and **DevOps** teams to produce software and manage requirements with **Agile** methods.
- Lead a pitch to product managers, resulting in a funded project to be showcased at Automation Fair 2024.

#### **Rockwell Automation**

Milwaukee, WI Summer 2023

Firmware Engineer, Intern

- Design and construct a machine to automate testing of motor protection equipment using **Python**, **C**, and **Al** architectures.
- Collaborate with large **scrum teams** to solve hardware and software anomalies with sprint Agile workflows.
- Utilize Python to create and analyze firmware ensuring safety and responsiveness of new products.

# Johnsonville Sausage

Sheboygan, WI

Controls and Software Engineer, Intern

Summer 2021 - Summer 2022

- Deploy software to provide added **security** and **safety** to manufacturing facility and equipment.
- Combine SQL databases with machine data using Python to improve machine uptime by 10%.
- Centralize machine and assembly code with engineers across the organization for increased security.
- Integrate SAP with USDA API certifications processes and process order management, using C++ and Java.

### **Kindred Games**

Seattle, WA (Remote)

Texture Artist and 2D Illustrator, Part-time

Summer 2021 - Spring 2024

- Create 2D vector graphics for a commercial video game that raised \$80,000 through crowd funding.
- Collaborate with a team of 6 members across the globe to contribute to the development of a successful video game.

#### Academic Projects

### Pub-Sub Back-end in Python | Course: Distributed Systems

- Constructed a robust, tolerance message broker using custom publication subscribe architecture in **Python**.
- Utilized pub-sub principles to scale system to 10,000 messages/sec.

#### Machine Learning for Algorithm Selection | Course: Artificial Intelligence

- Created 4 machine learning models to solve the Algorithm Selection Problem using PyTorch and TensorFlow.
- Investigated and analyzed neural networks and their applications to machine learning.

## Machine Learning for CycleGAN Image Mapping | Course: Machine Learning

- Design a Machine Learning model to map images from one domain to another in **Python**.
- Understand CycleGAN and Adversarial Network architectures using Scikit Learn and PyTorch.

#### Django Web Application | Course: Algorithms Design & Analysis

- Lead a small group of students to develop a feature complete web application with **Django** frameworks.
- Leveraged Python, JavaScript, and HTML to construct appealing backend and frontend software solutions.

# **Data Analysis of World Happiness** | Course: Programming Paradigms

Scraped world happiness data from the Internet with Python and web APIs, and displayed correlation data with Python.

# **Additional**

Hobbies: Develop video games in C# with my programming and graphic skills, with the goal of solo developing and releasing a game in the future. Work with local food bank for 5 years to relieve food insecurity in local area. Reading, Wake Boarding, Hiking, and spending time with my family and friends.