

Ryan Putka

rputka@nd.edu | (440) 429-5485 | Cleveland, OH

EDUCATION

University of Notre Dame
Bachelor of Science
Major: Computer Science

Notre Dame, IN
May 2027

EMPLOYMENT

KeyBank Cleveland, OH
Software Engineer Intern June 2025 - August 2025

- Contributed to the development of several internal and customer-facing chatbots using Node.js and Dialogflow CX as part of an Agile development team
- Independently designed and developed a proof of concept AI PowerPoint generator that converts simple prompts and structured data into branded, enterprise-ready slide decks, reducing presentation creation time by ~75%
- Pitched the tool to KeyBank's Generative AI Executive Review Board, securing leadership interest for continued development and a potential enterprise-wide rollout to over 17,000 users
- Gained cross-functional insights by shadowing product managers, scrum masters, and business analysts, contributing to roadmap planning, user feedback integration, and agile ceremonies

Proteus Capital Remote
Software Engineer Intern November 2024 - May 2025

- Developed an investment research platform using Python, FastAPI, JavaScript, and Azure AI Search, featuring secure authentication, document management, and AI-driven research report generation via Retrieval-Augmented Generation
- Integrated multiple internal and external APIs while adhering to the Model-View-Controller (MVC) architecture for scalable and maintainable code
- Achieved a 95% reduction in document processing and report creation time, cutting turnaround from days to minutes and enhancing research efficiency

PROJECTS

AI Portfolio Management Platform

- Developing an AI-powered portfolio management platform that enables users to track personal holdings, explore public assets, simulate investment strategies, and receive tailored insights through interactive financial tools
- Integrating OpenAI and Alpha Vantage APIs to generate personalized portfolio analysis, including risk assessments, asset diversification insights, and real-time market briefings
- Building a secure, scalable architecture with a Next.js frontend, FastAPI backend, and Postgres database via Supabase

Apple MCP Server

- Developed an MCP server enabling seamless integration between Claude and Apple productivity apps
- Empowered Claude to perform intelligent, context-aware actions across Apple's ecosystem — including scheduling calendar events, drafting and sending emails, setting reminders, retrieving and editing notes, accessing contact information, and generating map directions — all through natural language

Stock Analysis Agent

- Built an AI research agent that generates investment theses and SWOT analyses by scraping financial news, parsing SEC/EDGAR filings, and interpreting earnings reports
- Leveraged LangChain, Gemini, and browser automation tools to orchestrate multi-step workflows across public data sources and financial documents
- Enabled automated, context-aware insights into public companies, supporting informed investment decisions in seconds

RELATED COURSEWORK AND TECHNICAL SKILLS

Courses

- Calculus I, II, III, Linear Algebra and Differential Equations, Discrete Math, Fundamentals of Computing, Data Structures, Database Concepts, Operating System Principles, Systems Programming, Computer Architecture

Technical Skills

- Languages: Python, JavaScript, TypeScript, Java, C#
- Web & Frameworks: HTML, CSS, React, Next.js, Node.js, Flask, FastAPI, Tailwind, LangChain
- Cloud & DevOps: Azure, Google Cloud Platform, AWS, GitHub, GitLab
- Tools: JIRA, Confluence, Microsoft Office Suite