Contact

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(LinkedIn)

Top Skills

FastAPI

MongoDB

Redis

Daniel Shea

Computer Science Student at NCSU | Software Engineering at Cisco
| AI & Data Science

Raleigh, North Carolina, United States

Summary

Human-centered engineer. I build agentic systems to simplify
tasks.I'm drawn towards solutions that are technically challenging,
used at scale, and built with intention. I'm especially compelled
with the space where software engineering meets communication.
The best work happens when you can understand technical details
deeply, translate them clearly, and partner effectively with cross-
functional teams. That mix of problem-solving, collaboration, and
systems thinking is where I operate best.I care about how technology
impacts the people around it. As AI and machine learning become
increasingly intertwined with products and infrastructure, I want to
help build systems that are reliable, thoughtful, and aligned with
real human needs. I thrive in environments with ownership, a fast
learning curve, and opportunities to work on complex backend or
AI-driven solutions. I bring effort and curiosity to every team, and
I'm motivated by contributing to products that make a meaningful
difference at scale.

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Experience

Cisco
Software Engineer Intern
June 2025 - Present (7 months)
Research Triangle Park, North Carolina, United States

• Led development of a new feature that enabled agentic responses for
general support queries, allowing the Cisco AI Assistant to autonomously
retrieve information, reason over customer context, and provide more accurate
and streamlined support interactions.

• Contributed to and maintained an MCP (Model Context Protocol) server that
connected internal technologies to the AI Assistant platform, enabling unified
access to company-wide tools and data sources and improving reliability and
interoperability across engineering teams.

• Designed an internal LangChain/LangGraph/LangSmith agent used for testing complex workflows, tool integrations, and multi-step reasoning chains. This system provided engineers with a safe, observable environment to evaluate agent behavior before deployment.

Siemens
1 year 1 month

Software Engineer Intern
August 2024 - May 2025 (10 months)
Raleigh, NC

• Teams needed a better way to find the pages and documents required for critical work processes. I helped build a search engine using Retrieval-Augmented Generation (RAG) to access internal company data and streamline employee workflows.

• As part of the search engine initiative, I designed and implemented a scalable data-crawling system that used multi-threading to efficiently gather internal data for use in LLMs and data analysis tools.

• I worked with a cross-functional engineering team to design a generative ML system capable of reading complex engineering documents. This contributed significantly to automating quotations, allowing engineers to spend more time designing products instead of digging through lengthy PDFs.

Project Management Intern
May 2024 - August 2024 (4 months)
Raleigh, NC

• I noticed that employees were spending unnecessary time manually entering data, taking focus away from higher-value work. To address this, I built a data pipeline that transferred information to cloud storage for efficient analysis, reducing entry time from several minutes to a few seconds.

• Electrical and mechanical engineers struggled to locate the complex parts needed for product design. To streamline this process, I collaborated with software developers to build a RESTful API and a React-based web application, deployed using Docker and Azure, to make part discovery faster and more intuitive.

North Carolina State University
Data Science Intern @ Innovative Educational Computing Laboratory
March 2023 - May 2024 (1 year 3 months)

• I supported research on AI-driven systems designed to help students learn engineering more effectively. In the lab, I helped design an AI-based feedback tool that returned code feedback in seconds. The implementation required a full-stack approach, with Python powering the backend and TypeScript/React for the frontend.

• To improve the LLM-powered teaching tool, I optimized prompting strategies, increasing feedback accuracy by 25% and enabling more precise, reliable AI-generated guidance for students.

Potter Media Group
Software Engineer Internship
May 2023 - December 2023 (8 months)
Raleigh-Durham-Chapel Hill Area

• I joined a Raleigh med-tech startup where engineers were expected to take full ownership of their work. I developed a cross-platform application for Android, iOS, and the web, built for scalability and adaptable to rapid product changes.

Education

North Carolina State University
Bachelor's degree, Computer Science · (2022 - 2026)

Università Cattolica del Sacro Cuore
Semester abroad · (September 2025 - December 2025)

Christ School
High School Diploma, College/University Preparatory and Advanced High School/Secondary Diploma Program · (January 2021 - May 2022)

Asheville-Buncombe Technical Community College
Dual Enrollment · (August 2017 - December 2020)