

Contact

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(LinkedIn)

Top Skills

React.js

Vue.js

JavaScript

Languages

English (Native or Bilingual)

Honors-Awards

Eagle Scout Award

NC State Entrepalooza Minute to
Pitch it Finalist

Duke Energy Electric Powers
Scholarship Recipient

3rd Place New Venture Category NC
State Lulu E-Games

3rd Place New Venture Category NC
State Lulu E-Games

Publications

Developing the foundation for
assessment of Devices used for
Acute Ischemic Stroke Interventions
(DAISI) using a Coordinated Registry
Network

A Quantitative Framework to Identify
and Prioritize Opportunities in
Biomedical Product Innovation

Hartley LeRoy

Software & Product Engineer · Cross-Functional Builder · Turning
Vision Into Deliverables

Charlotte, North Carolina, United States

Experience

Lucid Bots

Software Engineer - Robotics Fleet Management

September 2024 - July 2025 (11 months)

Charlotte, North Carolina, United States

Led coordination of functional requirements, data ingestion architecture, and knowledge transfer between internal teams and external developers to build out cloud infrastructure for a drone fleet management system enabling the company to move away for 3rd party offerings.

Contributed to both robot-side and cloud-side development, supporting ROS2/PX4-based drones and AWS-based data pipelines.

Key Contributions:

- Lead creation of ROS2/PX4 robotic systems data ingestion pipelines leveraging various AWS Services. (i.e AWS IoT Core, Kinesis, Firehose, AWS Glue, S3, Athena, etc.)
- Architected and aided in developing telemetry, OTA update, and log ingestion pipelines
- Scoped and translated cross-functional requirements into dev-ready tasks
- Documented architecture and led onboarding for external development partners

Keep it Simple Storage

Project Manager - Software

September 2023 - September 2024 (1 year 1 month)

Charlotte, North Carolina, United States

Led product development for internal tools and customer-facing systems. Managed a team of 6 engineers, aligning technical implementation with business and operational goals. Scoped and prioritized features, facilitated cross-functional communication, and led sprint execution.

Key Contributions:

- Directed development across software and embedded systems

- Managed sprint planning and resource allocation
- Integrated firmware processes with cloud-based tooling
- Authored documentation for onboarding and knowledge transfer
- Aligned executive priorities with development timelines

First Turn Innovations, LLC

Prototype Engineer

February 2023 - September 2023 (8 months)

Huntersville, North Carolina, United States

Developed hardware/software prototypes for early-stage products. Translated vague design ideas into testable MVPs and conducted feasibility studies to validate technical direction.

Key Contributions:

- Built embedded and Python-based tools for rapid prototyping
- Conducted hardware evaluations and spec analysis
- Balanced performance, cost, and scalability in design
- Created proofs-of-concept with minimal supervision

Delphi Digital

Web 3.0 Infrastructure Research Analyst

August 2021 - October 2022 (1 year 3 months)

Performed technical and economic research on blockchain protocols.

Delivered actionable insights to institutional investors through reports and data visualizations.

Key Contributions:

- Analyzed tokenomics, governance models, and blockchain design
- Built custom research tools in Python and SQL
- Synthesized complex topics into digestible formats for clients
- Supported internal strategy and trend identification

Softthread

Software Engineer

November 2020 - November 2021 (1 year 1 month)

Miami, Florida, United States

Built front-end components and interfaces for a privacy-focused blockchain platform designed to protect health information. Collaborated across engineering teams to deliver performant, modular portals for secure data access and transaction management.

Project & Technical Highlights:

- Developed reusable UI components using React, Vue, and Next.js
- Built end-user portals for interacting with private blockchain systems
- Helped design and refine APIs for managing blockchain-based transactions
- Improved performance and user experience across critical interfaces

FDA

ORISE Fellow

August 2020 - August 2021 (1 year 1 month)

Miami, Florida, United States

Supported the research and planning for FDA's AI and blockchain initiatives. Assisted in data coordination across multiple medical device registries and internal working groups.

Key Contributions:

- Helped design AI and blockchain strategies for healthcare data
- Coordinated meetings across multiple FDA initiatives
- Contributed to published research in medical innovation

NC State Entrepreneurship

Graduate Assistant Technician

August 2019 - June 2020 (11 months)

Raleigh-Durham, North Carolina Area

Portal Technologies

Co-Founder, CEO

May 2019 - November 2019 (7 months)

Raleigh-Durham, North Carolina Area

TRASHR

Co-Founder

August 2017 - September 2018 (1 year 2 months)

Raleigh-Durham, North Carolina Area

- Working with a team of 4 NC State engineers to craft an Internet of Things (IoT) system that optimizes trash pick-up routes in order to improve efficiency, data collection, and decreases expenses for an institutions waste department
- Received over \$7,000 in startup funds from various sources as well as a pilot opportunity with the City of Durham, NC

Club Car

Electrical Engineering Intern

May 2018 - August 2018 (4 months)

Evans, Georgia

- Worked on supplier validation of various chip-sets in order to design a proof of concept IoT product that took information off of a vehicle's internal system and transmitted it to a database via Wi-Fi
- Impact: Applied engineering knowledge gained through my university education to a real world problem. Also gained insight into corporate structure and etiquette.

North Carolina State University

ECE Teaching Assistant

September 2017 - December 2017 (4 months)

Raleigh-Durham, North Carolina Area

University Tutorial Center NCSU

UTC Tutor

August 2016 - May 2017 (10 months)

Raleigh-Durham, North Carolina Area

- Worked to educate other college students in various courses from physics to calculus
- Impact: Improved my ability to convert high level material into a more understandable form, which in turn allowed my tutees to succeed in their classes

Education

North Carolina State University

Master's degree, Electrical Engineering - Machine Learning and Computer Vision · (2019 - 2020)

North Carolina State University

Bachelor's degree, Electrical and Electronics Engineering · (2015 - 2019)