

EDUCATION

Vanderbilt University • *Bachelor of Engineering*

August 2017 – May 2021

Computer Engineering with Department Honors
Engineering Management

GPA: 3.97/4.00
National Merit Scholar, Dean's List

PROFESSIONAL EXPERIENCES

Amazon Web Services • *Software Development Engineer Intern*

May 2020 – August 2020

- Constructed serverless infrastructure as code for AWS Educate that can accommodate up to 1,000,000 plus users
- Explored cloud-based data visualization methods to optimize business metrics analysis by stakeholders
- Designed real-time NoSQL data collection and display system with vertical and horizontal scaling capabilities
- Created strongly exception-safe and idempotent algorithm for data manipulation in distributed architectures
- Encrypted and secured internal data operations with identity and access management and virtual private cloud

DCS Corporation • *Systems Integration Engineer Intern*

May 2019 – May 2020

- Developed AR and VR driving systems for semi-autonomous armored fighting vehicles to enhance soldier safety
- Increased image process performance by 100% through line-of-sight optimization utilizing inertial and optical data
- Calibrated and synced inertial measurement units to achieve relative motion tracking while in moving vehicles
- Demonstrated working prototype to military investors and awarded with 2 significant contracts for the company
- Collaborated with Department of Defense clients and 6 contracting companies as onsite integration representative

China Merchants Bank • *Technical Product Manager Intern*

May 2018 – June 2018

- Strategized various FinTech solutions to digitalize the company's approach towards the financial industry

VivaLNK • *Product Development Engineer Intern*

July 2017 – August 2017

- Researched and tested 10 plus wearable designs to refine product usability, reliability, and sustainability
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PROJECT EXPERIENCES

Vanderbilt Aerospace Design Laboratory • *Autonomous Self-Orienting Vertical Lander*

August 2020 – Present

- Competing in the NASA Student Launch to design an autonomous vertical landing rocket with imaging capabilities
- Lead autonomous system integration for precision leveling, range communication, and digital imaging systems

Vanderbilt Peabody Research Institute • *Real-Time Classroom Analytical System*

August 2018 – May 2019

- Consulted clients on technology strategies and created web-app for real-time data analysis and visualization
 - Collaborated with U.S. Institute of Education Sciences and Tennessee Department of Education for field tests
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HONOR SOCIETIES & ORGANIZATIONS

Tau Beta Pi Honor Society • *Chapter Vice President*

November 2019 – Present

Eta Kappa Nu Honor Society • *Chapter Vice President*

November 2018 – Present

Institute of Electrical and Electronics Engineers • *Chapter President*

November 2018 – Present

Vanderbilt Free and Open Source Society • *Co-Founder*

November 2017 – Present

AWARDS & HONORS

ExploraVision *Winner* • Conrad Challenge *Semifinalist* • InvenTeams *Grantee* • Tomodachi Academy *U.S. Representative*

SKILLS

Cloud/Serverless/Distributed Computing • Embedded System • Control System • Systems Integration • Web Development
Autonomous Robotics • Database Management • Agile Methodology • Version Control • macOS/Windows/Linux • Chinese