Employment

Lead Mechanical Systems Test	Boeing	May 2017 – Present
Engineer		

- Lead a team of mechanical systems test engineers, providing guidance and oversight on testing and development projects.
- Designed and developed test procedures for mechanical systems, utilizing programming skills to automate data collection and analysis in LabVIEW.
- Created and implemented architecture for calibrated equipment and test configuration control. Used to configure test data acquisition and control system through various remote calls and APIs for LabVIEW and other internal codebases.
- Wrote efficient and reliable code for real-time systems, ensuring high-performance and accuracy.
- Mentored junior engineers to develop their skills and expertise.

Education

Knoxville, TNUniversity of TennesseeSummer 2024 – Spring 2026(Expected)(Expected)

- M.S. in Computer Science, partially completed.
- Graduate Coursework: Advanced Software Development; Algorithms and Data Structures; Compilers and Runtime Systems

Knoxville, TN University of Tennessee

Fall 2013 – May 2017

- B.S. in Mechanical Engineering, May 2017.
- Undergraduate Coursework: System Dynamics; Advanced Computer Aided Design; Thermal Engineering; Mechanisms; Finite Element Analysis; Professional Engineering; Advanced Additive Manufacturing.

Projects

- **Python-based stock predicting neural network:** Trained a neural network model to predict stock price movements based on sentiment scores and historical market data. Achieved accurate predictions and demonstrated the potential for AI-driven investment strategies.
- Open-Source Project: Catland (Godot Game Engine) Collaborated on an educational game focused on teaching Hiragana and Kanji to players. Developed game logic and features using GDScript in the Godot Game Engine. Created external applications in .NET for data processing and integration with a REST API for leaderboard database management.

Additional Experience and Awards

- **Publication** "Multi-solution Nature of Topology Optimization and its Application in Design for Additive Manufacturing", Rapid Prototyping Journal, November 2018
- First Place: Boeing Product Development Grand challenge Overall Winner, Boeing Commercial Airplanes Product Development Grand Challenge 2018: Wing Structure Redesign Mockup.

Languages, Technologies, and Skills

- Programming languages: Python, C, C++, Rust, Go, LabVIEW, GDScript, Swift
- Operating Systems: Windows, Linux, macOS
- Agile methodologies: Scrum, Kanban
- Version control systems: Git, Github, SVN
- Containerization: Docker (deployment and management)
- DevOps: Configuration of source control systems, team databases, and CI/CD pipelines
- Strong understanding of data structures, algorithms, and software design patterns
- Experience with real-time systems and embedded programming