# Kyle Tennison

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# Education

Georgia Tech 2024 - 2027

(In progress) B.S. Mechanical Engineering; GPA 4.0

Cañada College Transfer, Mechanical Engineering; GPA 4.0 2023 - 2024

# Work Experience

#### Product Management Intern, Onshape (a PTC company)

June 2025 - Present

- o Neuro-Evolution and Reinforcement Learning R&D
- o Rigidbody dynamic simulations

### Cloud, AI, Enablement & Solutions Intern, Ansys

June 2023 - April 2025

- $\circ~$  R&D of LLM & RAG workflows using LangChain
- o Developed pre- and post-processing Python APIs for cloud-native simulation
- o Integrated Onshape into cloud simulations

# Software Engineer Intern, Avarok Cybersecurity

June 2024 - September 2024

o Quantum-resistant ultra-encrypted messaging service development in Rust & TypeScript

### Subsystem Engineer, FRC Team 5940

March 2021 - June 2023

- Led Climber system development in 2023
- o Head of Machining in 2022
- o Competed in World Championships (2022 & 2023); ranked top 10 worldwide both times

# **Technologies**

Languages: Python (7 yr), Rust (3 yr), C (4 yr), C++ (4 yr), TypeScript/JavaScript (3 yr)

Tools: SolidWorks (4 yr), OnShape (6 yr), Ansys (2 yr), KiCad (1 yr)

# Projects

Ragposium

### Linear-Elastic FEA Solver (Magnetite)

o Rust-based finite element solver for isotropic, linear-elastic materials

www.ragposium.com

o Free RAG (Retrieval Augmented Generation) search engine for academic papers published on arXiv Self-Balancing Robot (Franklin) kyletennison.com/articles/franklin

# o ESP32-based, 3D printed self-balancing robot. Uses an accelerometer & PID loop

Newtonian Navier-Stokes CFD Solver github.com/kyle-tennison/navier-2d

# o A time-stepping Computational Fluid Dynamics (CFD) simulator for incompressible Newtonian fluids.

qithub.com/kyle-tennison/onpy

o An intuitive, open-source Python interface to Onshape APIs

# Awards & Certifications

# Georgia Tech ME2110 Design Award

April 2025

- $\circ~$  ME2110 competition robot won 1st place in Design
- o Evaluated on: Design Implementation, Fabrication Approach, Design Ingenuity, Creativity, and Presentation Effectiveness

# Cañada College C.A. Engineering

May 2024

o Certificate of Achievement in Engineering—awarded at commencement

# FRC Awards (Team awards)

March 2021 - June 2023

- o Industrial Design Award (2023)
- Excellence in Engineering (2023)
- o Competition Winner: Monterey 2022, Monterey

This document is available online at kyletennison.com/resume.pdf