Kyle Tennison

• Atlanta, GA ☑ kyletennison05@gmail.com in kyle-tennison • kyle-tennison

Education

Georgia Tech 2024 - 2027

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

Cañada College

Transfer, Mechanical Engineering; GPA 4.0

Professional Experience

Product Management Intern, Onshape (a PTC company)

o Neuro-Evolution and Reinforcement Learning R&D

 $\circ~$ Rigidbody dynamic simulations

CASE Intern, Ansys

o R&D intern on CASE (Cloud, AI, Solutions, and Enablement) team.

o R&D of LLM & RAG workflows using LangChain

o Developed pre- and post-processing Python APIs for cloud-native simulations

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

Team Member, FRC Team 5940

 $\circ~$ 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

Linear-Elastic FEA Solver (Magnetite)

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

o Free RAG (Retrieval Augmented Generation) search engine for academic papers published on arXiv

Self-Balancing Robot (Franklin)

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

Newtonian Navier-Stokes CFD Solver

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

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

Awards & Certifications

Georgia Tech ME2110 Design Award

 $\circ~$ 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

o Certificate of Achievement in Engineering—awarded at commencement

FRC Awards (Team awards)

- o Industrial Design Award (2023)
- o Excellence in Engineering (2023)
- o Creativity Award (2023)
- o Competition Winner: Monterey 2022, Monterey 2023, World Championship Roebling Division 2022

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

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2023 - 2024

June 2025 - Present

June 2023 - April 2025

March 2021 - June 2023

qithub.com/kyle-tennison/magnetite

www.ragposium.com

kyletennison.com/articles/franklin

github.com/kyle-tennison/navier-2d

qithub.com/kyle-tennison/onpy

April 2025

May 2024

March 2021 - June 2023