Permanent Address:
14118 Roamer Court
Centreville, VA 20121

TRI JUSTIN TRAN

tjt4tp@virginia.edu
(703)470-8875

Current Address:
1800 Jefferson Park Ave., Apt
14, Charlottesville VA

EDUCATION

University of Virginia, Charlottesville, VA
B.S. Biomedical Engineering   *August 2020 - May 2024*
GPA: 3.6

EXPERIENCE

Elder Research Inc., Charlottesville, VA
Data Science and Software Engineer Intern   *May 2023 - August 2023*
- Formulated custom ontologies using CMU Insider Threat Dataset for intricate knowledge graph construction. Seamlessly integrated these ontologies into JanusGraph and Neo4j, enabling effective data representation and exploration.
- Worked in an 8-member team to conceive, develop, and deploy an advanced chatbot using GPT-4 API for natural language processing, Neo4j for the graph database, Langchain for integration, and Streamlit for an intuitive UI, enabling seamless interactions with the graph database.
- Engineered a robust codebase to preprocess and import structured tabular data into an expansive graph database housing over 2,000,000 intricate node-edge associations using Gremlin, Python, Graphson, and PostgreSQL.
- Generated intricate visual representations of knowledge graphs through the utilization of NetworkX, delineating entity interconnections and traversal pathways.

Sequoia Neurovitality LLC, Charlottesville, VA
Capstone Intern   *September 2023 - Present*
- Designed a cutting-edge headband device aimed at detecting slow-wave sleep activity, offering a novel approach to Alzheimer's Disease therapy by emitting pink noise.
- Utilized CAD to craft the form factor of the device, ensuring optimal functionality, aesthetics, and comfort in the development of the headband.
- Developed codebases for both an interactive app facilitating user feedback with the device and a sophisticated system for sleep staging, specializing in the identification of slow-wave sleep.

University of Virginia, Charlottesville VA
School of Engineering Tutor   *September 2021 - Present*
- Participated in tailored one-on-one mentorship sessions with over 30 peers, cultivating the enhancement of their problem-solving skills and propelling their success in both Calculus 1 and Biomechanics disciplines.

UVA IM Recreation, Charlottesville VA
Tennis Instructor   *February 2022 - Present*
- Delivered comprehensive group tennis instruction catering to individuals of diverse age groups and skill levels, spanning from novice to advanced, in the capacity of an intramural tennis instructor.

ACADEMIC PROJECTS

Linear Peristaltic Infusion Pump- BME Design and Discovery, UVA
August 2021 - December 2021
- Applied an array of acquired skills encompassing CAD design, 3D printing, Arduino programming, and soldering techniques, cultivated over the course of the semester, to development an operational linear infusion pump.

Gamebox Original Game- Intro to Computer Science, UVA
February 2021 - May 2021
- Leveraged proficient programming acumen in Python, acquired over the duration of the semester, to develop an innovative gaming application.

SKILLS

- Computer skills: Python, R, JanusGraph, SQL, MATLAB, NetworkX, AWS SageMaker, Excel, Autodesk Fusion 360, ImageJ, Neo4j, Streamlit, Langchain