# **Paul Tee**

Storrs, CT | 832.451.9176 | paul.tee@uconn.edu Linkedin: https://www.linkedin.com/in/paul-tee/

## **EDUCATION**

**University of Connecticut** - Storrs, CT M.S. Computer Science, Ph.D. Mathematics

University of Texas at Austin - Austin, TX

B.S. Mathematics

May 2026

GPA: 3.98/4.0

May 2019

GPA: **3.81**/4.0

#### **SKILLS**

• Languages: Python, Java, JavaScript, Typescript, Swift, HTML, CSS.

- Frameworks: React, Node.js, Express, SwiftUI, AVFoundation.
- Technologies: Git, Jest, Cypress, Postman, Figma, AWS, LaTeX.

#### WORK EXPERIENCE

### **University of Connecticut**

Sept 2021 - Present

Mathematical Researcher, Teaching Assistant & Personal Tutor

- Won a combined \$40,000 in research grants for geometric analysis and topology, and presented at Simons Laufer Mathematical Sciences Institute (formerly MSRI).
- Coordinated calculus class sizes of 500+. Mentored students in recitation with a 95% retention rate. Scored 4.6/5 on teaching evaluations, and the average student passed with a grade of B+.
- Conducted one-on-one tutoring sessions with upper level undergrad and graduate students in courses such as algorithms, graph theory, and discrete math. Maintained a rating of 4.8/5 over 200+ sessions.

#### **PROJECTS**

**Portfolio:** [ https://paul-tee-portoflio.vercel.app/ ]

**Virtual Sampling Machine** | Swift, SwiftUI, AVFoundation

July 2024 - Oct 2024

iOS Music Sampler

- Developed a digital audio workstation allowing users to modify songs from their music library with audio effects, achieving **over 95% positive user feedback** rating for its functionality.
- Conducted in-depth research, compiling over **60 pages of documentation** on audio signal processing libraries.
- **Identified and reported two critical bugs** in Apple's AVFoundation library; Apple's support team acknowledged and began investigating, potentially **impacting thousands of developers**.
- Prototyped UI with Figma, leveraging feedback from 20+ user surveys to refine the experience.
- Designed using neuromorphic principles, resulting in a 30% increase in user satisfaction with the app's aesthetics and workflow.

# $\textbf{Graph Visualization Project} \ | \ \textit{React, Typescript, JavaScript, Python}$

Jan 2024 – May 2024

*Full-stack web app* 

- Created an educational app that pairs algorithm pseudocode with visualization on a user-generated graph, with over **90% of users reporting enhanced understanding** of algorithmic concepts.
- Built a responsive, user-friendly front-end with React with Material UI to create a modern interface.
- Maintained high code quality through continuous unit testing, achieving 90% code coverage with Jest and significantly reducing bugs in production.
- Developed a **RESTful API** with Node.js and Express to handle graph data processing, executing Python scripts server-side and delivering JSON formatted results for easy integration.
- Deployed to Vercel, utilizing serverless architecture for scalability and optimized load times.

#### RELEVANT COURSEWORK

• Machine Learning, Cryptography, Quantum Computing, Probability, Statistics, Data Structures and Algorithms, Graph Theory, Linear Algebra, Discrete Math.