Elliot Topper

Oakhurst, NJ <u>xaridar.github.io</u> linkedin.com/in/elliot-topper (848)-220-5442 elliotbtopper@gmail.com github.com/xaridar

Education

The College of New Jersey (TCNJ), Ewing, NJ

May 2025

Bachelor of Science in Computer Science, Minor in Interactive Multimedia

GPA: 3.99 / 4

Skills

Languages: Javascript, Typescript, Python, Java, PHP, C, C++, C#

Tools & Frameworks: React, Next.js, Node.js, Express, Flask, jQuery, TailwindCSS, Bootstrap, Unity, MATLAB

Frontend Tools: HTML, CSS, Yarn, NPM, Material UI, FontAwesome Backend Tools: Git/GitHub, PostGreSQL, MySQL, MongoDB, Redis, Firebase

Other Skills: Problem Solving, Public Speaking, Collaboration, Leadership, Academic Writing

Work and Research Experience

• National Institute of Standards and Technology (NIST), Boulder, CO

SURF Research Fellow - Statistical Engineering Division

June 2024 - Aug 2024

Developed a web application for dynamically calculating microbial Limits of Detection (LOD)

- Improved performance and accessibility of existing web applications through consultation
- Developed a tool for generating future web applications for statistical models
- Department of Computer Science, TCNJ, Ewing, NJ

Computer Science Department Drop-In Tutor

Sept 2024 - Present

Computer Science Peer Mentor - Computer Science I, Data Structures

Sept 2023 - Dec 2024

Researcher (VR) - Dr. S.M.S. Ferdous

Jan 2022 - July 2023

- Developed an online data management portal for cybersickness studies in a team
- o Conducted and managed a study in cybersickness data collection
- Collected and analyzed electroencephalogram (EEG) data in VR using *Unity*, *MATLAB*, and *Python* to develop standardized processes of data analysis for cybersickness research
- TCNJ Tutoring Center, Ewing, NJ

Tutor

Sept 2023 - Dec 2023

Apr 2024 - Present

Apr 2023 - May 2024

Apr 2022 - May 2023

 Courses tutored: Data Structures, Discrete Structures, Computer Architecture, Analysis of Algorithms, Operating Systems, Web Design

Conference Presentations and Papers

- "Visualsickness: A web application to record and organize cybersickness data." E. Topper, P. Arroyave, S.M.S. Ferdous. 2023 IEEE Conference on Virtual Reality and 3D User Interfaces. Shanghai, China (Virtual). 25-29 March 2023. Corresponding manuscript: 10.1109/VRW58643.2023.00104.
- "Initial feasibility study of a child friendly animated cybersickness questionnaire." P. Arroyave, E. Topper, M. Kahora, S.M.S. Ferdous. *ACM CHI 2023*. Hamburg, Germany. *23-28 April 2023*.

Projects and Collaborations

- Portfolio Portfolio website built in Next.js and MongoDB, which showcases my project work
- <u>List n' Learn</u> Visually-accessible flashcard application, built collaboratively in *React* with *MongoDB*
- WordAround Wordle-like puzzle game that challenges players to guess letters in a circularly-oriented word; developed in HTML, CSS, and JavaScript

Links and more detailed information on these and other projects can be found at <u>xaridar.aithub.io/projects</u>.

Honors and Awards

TCNJ Computer Science Dean's List (Fall 2021 - Fall 2024); TCNJ Computer Science Third Year Award - 2024; Phi Kappa Phi - 2024; Upsilon Pi Epsilon - 2023; TCNJ Computer Science Second Year Award - 2023; TCNJ Computer Science First Year Award - 2022; HackTCNJ Best Hack - 2022

Leadership Positions

• TCNJ Japanese Student Association, Ewing, NJ

President (100+ members, 10 board members, over 25 events)
Treasurer (managed a \$30,000 budget)
Fundraising Co-Chair (fundraised over \$1,800)

• Upsilon Pi Epsilon Honor Society, Ewing, NJ

Vice PresidentSept 2024 - PresentSecretarySept 2023 - May 2024