# Elliot Topper

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## Education

The College of New Jersey (TCNJ), Ewing, NJ — *May 2025*
Bachelor of Science in Computer Science, — GPA: 3.99 / 4.0

## Skills

**Languages**: Java, Javascript, Typescript, Python, PHP, C, C++, C#
**Tools & Frameworks**: React, Next.js, Flask, Node.js, Express, jQuery, Bootstrap, TailwindCSS, Unity, MATLAB
**Frontend Tools**: HTML, CSS, EJS, ReactJS
**Backend Tools**: Git/GitHub, MySQL, PostGreSQL, 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 — *June 2024 - Aug 2024*
  Affiliate Researcher - Summer Undergraduate Research Fellowship Program
  - Developed a web application for dynamically calculating microbial Limits of Detection (LOD)
  - Improved performance and accessibility of existing web applications through thorough consultation
  - Developed a tool for generating future web applications for statistical models
- **TCNJ Tutoring Center**, Ewing, NJ
  Student Tutor — *Sept 2023 - Dec 2023*
  - Courses tutored: Data Structures, Discrete Structures, Computer Architecture, Analysis of Algorithms, Operating Systems, Web Design
- **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*
  Student Researcher (VR) - Dr. S.M.S. Ferdous — *Jan 2022 - July 2023*
  - Developed an online data management portal for cybersickness studies in a team
  - 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

## 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*. Corresponding conference paper not published.

## Projects and Collaborations

- **List n' Learn -** Visually-accessible flashcard application, built in *React* with *MongoDB*
- **Dungeon of Curses** - Text-based roguelike game which won Best Hack at the HackTCNJ 2022 hackathon in *Python* and the ncurses library, developed collaboratively
- **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 notable projects can be found at xaridar.github.io/projects.*

## Honors and Awards

Phi Kappa Phi - 2024; Upsilon Pi Epsilon - 2023; TCNJ Department of Computer Science Second Year Award - *2023*; TCNJ Department of Computer Science First Year Award - *2022*; HackTCNJ Best Hack - *2022*

## Leadership Positions

- **TCNJ Japanese Student Association**, Ewing, NJ
  President — *Apr 2024 - Present*
  Treasurer — *Apr 2023 - May 2024*
  Fundraising Co-Chair — *Apr 2022 - May 2023*
- **Upsilon Pi Epsilon Honor Society**, Ewing, NJ
  Vice President — *Sept 2024 - Present*
  Secretary — *Sept 2023 - May 2024*