

Tyler Gurth

69 Brown St, Box 3192 | Providence, RI 02912 | Phone: (973) 527-1435 | E-Mail: Tyler_Gurth@brown.edu

EDUCATION

Brown University 4.00/4.00 GPA Providence, RI | **Expected Graduation May 2025**

Sc.B. in Computer Science, A.B. in History of Art and Architecture

Relevant Courses: Introduction to Object Oriented Programming, Program Design with Data Structures and Algorithms, Introduction to Discrete Structures and Probability, Software Engineering, Introduction to Computer Systems, Linear Algebra

Parsippany Hills High School, 4.81/4.00 GPA *Valedictorian of Class* Morris Plains, NJ | Class of 2021

RESEARCH

The Virtual Rosetta, *Researcher* Providence, RI | April 2022 – September 2022

- Researched effective methods for dimensional reduction data visualization such as T-SNE and UMAP
- Scripted Python BeautifulSoup web scraping programs to convert the HTML corpus of data into PNGs and compile datasets
- Generated serialized matrices, minimum spanning trees, and force directed graphs using Python science libraries like SciPy, Sci-Kit Learn, and Pandas
- Visualized complex data in actionable graphs using PyPlot, revealing qualitative trends

WORK EXPERIENCE

Brown University Computer Science, *Head Teaching Assistant* Providence, RI | September 2022 – Present

- Holds weekly office hours and labs to help students with course material and programming projects
- Assists Professor in grading, designing rubrics, and creating assignments for the course
- Manages a course staff of over 30 TAs, and acts as a touchpoint between the TAs and professor

Escape Garden State, *Technical Developer and Game Master* Fairfield, NJ | June 2021 – November 2022

- Developed and designed new escape room GUI web app with Vite.js and Google Firebase database
- Streamlined employee tasks by programming a JavaScript Discord bot with time conversion math utils and report generating system
- Trained 5 new employees in how to run rooms, use the company web apps, and open/close the facility

Brown University Admissions, *Tour Guide and Admissions Ambassador* Providence, RI | April 2022 – Present

- Guides weekly tours through campus, answering questions based on campus knowledge and practicing public speaking
- Represents Brown as an institution and maintains a positive image for the University

RELEVANT PROJECTS

Scrappy, *Developer* December 2022

- Used React TypeScript Framework to build out the components of the site, coupled with React Router to create a navigable state system authenticated through Google OAuth
- Developed a Spark API server to query and store information in a MongoDB Java database
- Programmed an NLP sorting algorithm using GloVe English feature vectors to sort posts based on relevant hashtags

LEADERSHIP EXPERIENCE

Brown University Band, *Saxophone Section Leader, Dance Captain, Alumni Liaison* Providence, RI | December 2021 – Present

- Coaches section throughout sectional rehearsals, ensuring all members are confident in the music to be played
- Accounts for all members of the section, teaching newer members band traditions and marching style
- Maintains relationships with alumni, raises money through fundraising campaigns, issues weekly updates to community

SKILLS & INTERESTS

Technical Skills: React, MongoDB, AWS, Node, GitHub, Git, Firebase, Jest, Figma, Blender, Photoshop, and Microsoft Office Suite

Programming Languages: Java, Python, JavaScript, HTML, CSS, TypeScript, C, C++

Languages: English (Native) and Spanish

Interests: Using Artificial Intelligence to replicate, produce, date, and credit artwork. 3D modeling of architectural designs.