

Tyler Gurth

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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 Coursework: Object Oriented Programming, Data Structures and Algorithms, Discrete Structures and Probability, Software Engineering, Computer Systems, Statistics, Linear Algebra

PROFESSIONAL EXPERIENCE

Billmax, *Software Engineering Intern*

Remote | June 2023 – Present

- Implemented an offline-first cross platform mobile app using Google Flutter and SQLite for service technicians
- Planned UI for mobile app, wireframing mobile-oriented content and components in Figma to improve brand modernity
- Drafted API unit tests with SwaggerUI and Postman, connecting new mobile app with existing company endpoints

Brown University Computer Science, *Head Teaching Assistant*

Providence, RI | September 2022 – Present

- Assists Professor by holding weekly office hours, grading, designing rubrics, and creating assignments for the course
- Manages a course staff of over 35 TAs, a class of over 300 students, and acts as a touchpoint between the TAs and professor
- Accelerated administrative work by scripting algorithms to create student lab groups and grade hundreds of assignments

Escape Garden State, *Technical Developer and Game Master*

Fairfield, NJ | June 2021 – October 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 reporting system
- Trained 5 new employees in how to open/close the facility, engage with customers, and run escape rooms

Brown University Admissions, *Tour Guide and Admissions Ambassador*

Providence, RI | April 2022 – Present

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

RESEARCH

The Virtual Rosetta, *Researcher*

Providence, RI | April 2022 – September 2023

- Scripted Python BeautifulSoup web scraping programs to convert the HTML corpus of data into PNGs and compile datasets
- Generated serialized matrices, MSTs, and force directed graphs using Python libraries like SciPy, Sci-Kit Learn, and Pandas
- Visualized complex data of over 4000 nodes using dimensional reduction methods such as T-SNE and UMAP
- Contributes as an author to a research publication about the use of data visualization in the emerging digital humanities field

EXTRACURRICULAR ACTIVITIES

Brown Track and Field, *Student Athlete, Student Athlete Representative*

Providence, RI | September 2021 – Present

- Competes at the D1 level in the throwing events, representing Brown in the shotput and hammer throw and practicing daily
- Represented the team in the 2022-2023 school year in SAAC, maintaining communication between admin and athletes
- Started a queer athlete social group within the track team, and is an active member of Brown's Student Athlete Gay Alliance

Brown University Band, *Saxophone Section Leader, Dance Captain, Alumni Liaison*

Providence, RI | December 2021 – Present

- Leads a section of 10 players throughout sectional rehearsals, ensuring all members are confident in the music to be played
- Maintains relationships with 600 alumni, spearheads fundraising campaigns, and issues weekly updates to community

Music101, *Piano Instructor*

Providence, RI | December 2022 – Present

- Volunteers weekly, teaching peers at Brown basic piano skills to help enrich the community through free music lessons

SKILLS & INTERESTS

Technical Skills: React, MongoDB, AWS, Node, GitHub, Git, Firebase, Jest, Figma, Flutter, Photoshop, Google OAuth, and Microsoft Office Suite, Spark, Natural Language Processing, LaTeX, Dimensional Reduction, Data Visualization

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

Languages: English (Native) and Spanish

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