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, Data Science, Computer Vision, Scientific Computing

PROFESSIONAL EXPERIENCE

Duolingo, *Software Engineering Intern* **Pittsburgh, PA | June 2024 – August 2024**
- Wrote RESTful Flask API endpoints to support new dashboards, leveraging MySQL database queries
- Automated plural ruleset maintenance for app localization via code generation with the Python AST for Swift, TypeScript, Python, and Kotlin libraries
- Built language launching dashboard in React to condense and expedite existing manual localization processes

Brown University Computer Science, *Meta and Head Teaching Assistant* **Providence, RI | September 2022 – Present**
- As Meta TA, coordinate the entire CS TA program – manage, train, and lead approximately 400 TAs each semester
- Assist professors by holding weekly office hours, grading, designing rubrics, and creating assignments for the course
- Manage a course staff of over 35 TAs, a class of over 300 students, and act as a touchpoint between the TAs and professor
- Accelerate admin work by scripting algorithms to create lab groups, automate emails, and grade thousands of assignments

Brown University Admissions, *Tour Guide and Admissions Ambassador* **Providence, RI | April 2022 – Present**
- Guide weekly tours through campus to groups of 25-35 people, effectively addressing campus questions and concerns
- Represent Brown as an institution and maintain a positive image for the University as an articulate speaker

Billmax, *Software Engineering Intern* **Remote | June 2023 – August 2023**
- Implemented an offline-first cross platform mobile app using Google Flutter and SQLite for 400+ 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 RESTful API

RESEARCH

The Virtual Rosetta, *Researcher* **Providence, RI | April 2022 – September 2023**
- Scripted Python Beautiful Soup web scraping programs to convert the HTML corpus of data into PNGs and compile datasets
- Generated serialized matrices, MSTs, and force directed graphs using Machine Learning and libraries like SciPy and Pandas
- Visualized complex data of over 4000 nodes using dimensional reduction methods such as T-SNE and UMAP
- Contribute as an author to a research publication about the use of data visualization in the emerging digital humanities field

EXTRACURRICULAR ACTIVITIES

Brown University Band, *Saxophone Section Leader, Webmaster, Alumni Liaison* **Providence, RI | December 2021 – Present**
- Instruct and guide my section of 10 players throughout sectional rehearsals, ensuring optimal performances at sporting events
- Maintain relationships with 1300 alumni and spearhead fundraising campaigns that have generated over $50,000 in donations

Music101, *Piano Instructor* **Providence, RI | December 2022 – September 2023**
- Volunteer weekly, teaching peers at Brown basic piano skills to help enrich the community through free music lessons

SKILLS & INTERESTS

Technical Skills: React, React Redux, MongoDB, AWS, Node, Flask, Spring, GitHub, Git, Firebase, Jest, Figma, Flutter, TensorFlow, PyGame, Photoshop, Google OAuth, Microsoft Office Suite, Spark, Natural Language Processing, LaTeX, Dimensional Reduction, Data Visualization, Scripting
Soft Skills: Public speaking, teaching, education development, group collaboration, leadership, fundraising
Programming Languages: Java, Python, JavaScript, HTML, CSS, TypeScript, C, C++, SQLite, SQL, Dart, MATLAB, Kotlin, Swift
Languages: English (Native) and Spanish (Professional Proficiency)
Interests: Using Artificial Intelligence to replicate, date, and credit artwork. 3D modeling of architectural designs. Playing piano.