AUSTIN LIU

469-975-8324 | `austin_f_liu@brown.edu` | austinliu.dev | github.com/austinliu05 | linkedin.com/in/austin-f-liu

EDUCATION

Brown University Providence, RI
B.S. in Applied Math-Computer Science, B.A. in Economics *2027* | **GPA** *3.9*

- **Relevant Coursework**: Operating Systems, Machine Learning, Deep Learning, Data Structures and Algorithms, Statistical Inference, Applied Ordinary Differential Equations, Computational Probability

WORK EXPERIENCE

Symbotic May 2025 - August 2025
Software Engineer Intern *Boston, MA*

- Cut API query latency by 80% through server-side execution, accelerating warehouse operations nationwide
- Automated health checks for 20M+ SKUs, ensuring 99.95% data integrity and preventing critical fulfillment errors
- Deployed enterprise C# application to 10+ national sites, improving maintainability and reducing downtime
- Optimized SQL queries by converting scans into index seeks, reducing execution time by 60%

Helios Technologies February 2025 - May 2025
Software Engineer Intern *Remote*

- Prototyped self-hosted GraphRAG using vector + graph databases, reducing query latency by 40%
- Built React moderation dashboard with virtualized lists, reducing render time by 50% and improving admin efficiency
- Maintained CI/CD pipelines and QA processes for a production web app serving 1K+ active users
- Automated scheduled messaging with AWS Lambda/SES/CloudWatch, eliminating manual operations

PROJECTS

Guitar Tab Transformer | *React, Django, TensorFlow, Python* June 2024 - Current

- Extended dadaGP to support single-track guitar input and irregular tunings, expanding package usability
- Developed OpenCV–TensorFlow pipeline to process 5K+ sheet music images with morphological operations
- Trained CNNs to detect noteheads and pitches with 95% accuracy, automating note extraction and parsing

Beya | *React Native, Firebase, Pinecone, AWS* November 2024 - Current

- Engineered RAG pipelines to deliver contextual retrieval, streamlining workflows across all applications
- Built SaaS platform generating $20K+ ARR from 10+ clients, delivering scalable AI-powered workflow solutions

LEADERSHIP

Family Head November 2024 - Current
Chinese Student Association *Providence, RI*

- Mentored 10 underclassmen, providing academic support and organizing community-building activities
- Organized 5+ cultural events (e.g., boba workshops, Lunar New Year dinners) to foster community engagement

Backend Software Lead September 2024 - Current
Brown Formula Racing *Providence, RI*

- Led backend software team of 10 engineers, driving design discussions, task delegation, and mentorship
- Collaborated across subteams to deliver racing software, contributing to a Top 20 national finish

SKILLS

Languages: Python, SQL, Java, C, C#, JavaScript/TypeScript

Frameworks: React, Django, .NET, TensorFlow, OpenCV

Databases/Cloud: Firebase, Amazon Web Services, Google Cloud Platform, MySQL, Pinecone

Interests: Fingerstyle Guitar, Brown Men's Volleyball, Steak and Sushi, Sports