

# BENJAMIN PETRILLO

benpetrillo.bp@gmail.com - linkedin.com/in/ben-petrillo - github.com/benjaspet - benpetrillo.dev  
Available: May - December 2025

## EDUCATION

**Northeastern University**  
*Candidate for a Bachelor of Science in Computer Science*  
**Honors:** Dean's List – **GPA:** 3.65/4.00  
**Coursework:** Data Structures & Algorithms, Object-Oriented Design, Distributed Systems, Computer Systems

Boston, MA  
*Expected May 2026*

## TECHNICAL SKILLS

**Languages:** Java, Go, TypeScript/JavaScript, Python, HTML/CSS, C++  
**Frameworks:** React, React Native, Next.js, Spring Boot, FastAPI, Node.js, Docker, Terraform, JUnit, Jest  
**Technologies:** AWS EC2, PostgreSQL, MongoDB, Prisma, Firebase, Nix, Git, Scikit-learn, JetBrains IDE

## EXPERIENCE

**FirstGlance**  
*Software Engineer Co-op*

Boston, MA  
*Sep – Dec 2024*

- Introduce a master traction page, onboarding components, and user profile flow for an internal discovery tool with a multitude of search, filter, and settings functionality, significantly accelerating startup discovery for users
- Generate a migration pipeline to transition data from Firebase to PostgreSQL with schema design
- Automated deployment to AWS EC2 instances using Terraform and CD pipelines, speeding up workflows
- Integrate 25+ OpenAPI-compliant REST endpoints with FastAPI, enforcing strict type validation
- Leverage pytest and bun-test to develop performance and API-level test suites, achieving 88% coverage

**Generate Product Development**  
*Software Technical Lead, Software Engineer*

Boston, MA  
*Sep 2024 – Present*

- Lead a team of 5 engineers in the development of PlateMate, a data-driven insight application for restaurants
- Manage project milestones, delegate tickets, review pull requests, and lead project architecture discussions
- Build a development environment using Nix, and develop CI workflow scripts to improve development velocity
- Implement 20+ CRUD routes for auth, users, and venue interactions for a nightlife discovery platform
- Create mobile navigation stacks and architect auth flows leveraging JSON webtokens & Supabase PostgreSQL
- Complete weekly scrum sprints with a team of 12 to adhere to ambitious project demonstration deadlines

**Khoury College of Computer Sciences**  
*Teaching Assistant – CS3500 and CS2510*

Boston, MA  
*Jan – Jul 2024*

- Direct 3 lab sections of 40+ students, conducting lecture-style sessions on software development best practices
- Grade 30+ assignments and lab activities weekly, collaborating with professors on grading rubrics and activities
- Hold office hours for one-on-one mentoring on software engineering, data structures, and MVC patterns

## PROJECTS

**Nightlife** ☞ – *Go, React Native, PostgreSQL, Docker, Supabase*

Sep – Dec 2024

- Develop a mobile app utilizing the Expo SDK allowing users to rate, review, and discover nearby nightlife venues
- Utilize Google Maps to populate internal PostgreSQL database with data for 3000+ venues across the USA
- Model and design database architecture using Lucidechart, identifying relationships for infrastructure scalability

**Elixir Music** ☞ – *Java, Lavalink, Javalin, TypeScript, MongoDB*

May 2022 – Aug 2024

- Develop a multithreaded Discord music application on an agile team serving 350,000+ users & 500+ servers
- Leverage multithreading for concurrent audio streams across voice channel clusters with Lavalink audio managers
- Implement a custom playlist API with CRUD operations using MongoDB and bearer token authentication

**Hexagonal Reversi** – *Java, Swing, JUnit*

Nov – Dec 2023

- Leverage MVC design patterns to develop the game Orthello, integrating observer patterns for data encapsulation
- Engineer 200+ sanity, unit, and mock tests to ensure code correctness, find edge cases, and validate design choices
- Adjust to introduction of external codebase using adaptor patterns, integrating foreign strategies and coordinates

**PokéVault** ☞ – *TypeScript, React, Express.js, Bootstrap*

May 2022 – Aug 2024

- Engineer a full-stack Pokémon card discovery application to fetch data such as pricing history, competitive playability, and expansion data, utilizing mobile-first stylesheets and Bootstrap 5 for responsiveness
- Implemented an infinite scrolling feature and miniature recommendation system in React for seamless discovery