

BENJAMIN PETRILLO

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Available: May - December 2025

EDUCATION

Northeastern University

Boston, MA

Candidate for a Bachelor of Science in Computer Science

Expected May 2026

Honors: Dean's List - GPA: 3.65/4.00

Coursework: Algorithms & Data Structures, Object-Oriented Design, Distributed Systems, Theory of Computation

TECHNICAL SKILLS

Languages: Java, Go, TypeScript/JavaScript, Python, HTML/CSS, C++

Frameworks: React, React Native, Next.js, Spring Boot, FastAPI, Node.js, Django, Docker, Terraform, JUnit, Jest

Technologies: AWS (EC2, S3, Lambda), MySQL, PostgreSQL, MongoDB, Nix, Git, Scikit-learn, JetBrains IDE

EXPERIENCE

FirstGlance

Boston, MA

Software Engineer Co-op

Sep - Dec 2024

- Introduce a master traction page, onboarding components, and user profile flow for an internal startup discovery tool with search, filter, input validation, and settings functionality using Next.js, accelerating analytical efforts
- Generate a migration pipeline to transition populated data from Firebase to PostgreSQL with schema design
- Automate 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

Boston, MA

Software Technical Lead, Software Engineer

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 an agile team of 12 to adhere to ambitious project demonstration deadlines

Khoury College of Computer Sciences

Boston, MA

Teaching Assistant - CS3500 and CS2510

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

PlateMate ☞ - Go, MongoDB, Nix, React Native, TypeScript

Dec 2024 - Present

- Spearhead CI workflows, API architecture, and frontend components for a data-driven meal insight platform

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 Places API to populate internal PostgreSQL database with data for 3000+ venues across the USA
- Architect RESTful endpoints and frontend components for auth flows, state management, and user settings

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 2024 - 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
- Implement an infinite scrolling feature and miniature recommendation system in React for seamless discovery