Colin Wong

(XXX) XXX-XXXX | xxxxxxxxxxx@gmail.com | linkedin.com/in/wongcolin45 | github.com/wongcolin45 | portfolio

EDUCATION

Northeastern University | Khoury College of Computer Sciences   **Expected Apr 2027**
B.S. in Computer Science, Minor in Mathematics   GPA: 3.83 / Major GPA: 3.97
- **Coursework:** Algorithms and Data, Computer Systems, Database Design, Object-Oriented Design, Discrete Structures, Logic and Computation, Theory of Computation, Linear Algebra, Probability and Statistics

EXPERIENCE

Incoming Software Engineering Co-op   **Jan 2026 – Jun 2026**
Philips Healthcare   Cambridge, Massachusetts
- Will develop applications and components for patient monitoring systems as part of a collaborative software engineering team.

Teaching Assistant, Algorithms and Data   **Sep 2025 – Dec 2025**
Northeastern University - Khoury College of Computer Sciences   Boston, Massachusetts
- Support a class of **400+ students** through weekly office hours and by grading homework and midterm assessments
- Reinforce concepts like **asymptotic analysis**, **divide-and-conquer**, **dynamic programming**, and **greedy algorithms**
- Collaborated with the professor to provide input on grading rubrics and partial credit policies, contributing to fair and consistent evaluation standards

Backend Developer   **May 2025 – Aug 2025**
Liaizon – Startup in Babson College's Summer Venture Program   Wellesley, Massachusetts
- Led backend development as the sole engineer for a social platform connecting entrepreneurial students
- Developed a production-grade **FastAPI** backend with **80+ REST endpoints** supporting authentication, event matching, team formation, and real-time chat
- Containerized and deployed the backend via **Docker** on **AWS Elastic Beanstalk,** ensuring reliable performance

PROJECTS

Graph NEU | Next.js, FastAPI, PostgreSQL, Docker   **Apr 2025 – Present**
- Developed an interactive graph-based visualization tool for exploring Northeastern University's course catalog
- Designed a **PostgreSQL schema** and populated it by web scraping course data with **Beautiful Soup**
- Implemented graph traversal and layout algorithms using **NetworkX** to render course dependency graphs

Healthcare Plan Comparator | React, FastAPI, AWS   **Jan 2025 – May 2025**
- Developed the backend services for a full-stack web application, designed to compare healthcare plans
- Collaborated in a 6-person team using **Git**, **Jira**, and **Agile sprints** to manage backend development tasks
- Designed and implemented a **FastAPI** backend to handle PDF uploads, user data submissions, chatbot messaging and document processing via **AWS S3** and **Amazon Textract**

Multiplayer Chess Platform | React, Spring Boot, WebSockets, Docker   **Nov 2024 – Jan 2025**
- Built a full-stack multiplayer chess game with a **React UI** and **Spring Boot** as the backend for game logic
- Implemented chess logic with **OOP**, using **encapsulation** and **design patterns** to model pieces and game state
- Integrated real-time move synchronization over **WebSockets (Stomp.js/SockJS)** for low-latency gameplay
- Deployed frontend via **Vercel** and containerized backend via **Docker** on **Render** for scalable and reliable hosting

TECHNICAL SKILLS

Languages: Java, Kotlin, Python, C, SQL, OCaml, TypeScript/JavaScript, HTML/CSS
Libraries/Frameworks: Next.js, React, Spring Boot, Express, FastAPI, Flask
Databases: MySQL, PostgreSQL, SQLite, MongoDB