

# Michael Long

Available starting May 2025

long.mich@northeastern.edu | (857) 488-9299

[www.linkedin.com/in/michaeltlong10](https://www.linkedin.com/in/michaeltlong10) | [github.com/mikelong10](https://github.com/mikelong10)

[www.mikelong.world](https://www.mikelong.world)

## Education

**Northeastern University**, Boston, MA

Sep 2021 – May 2025

B.S. in Computer Science and Business Administration

GPA: 3.9 / 4.0

**Coursework:** Algorithms & Data Structures, Object-Oriented Design, Networks & Distributed Systems, Database Design, Discrete Mathematics, Software Engineering, Data Science, Calculus 3

## Skills

**Languages:** TypeScript / JavaScript, Python, Java, HTML, CSS, SQL, Swift

**Tools:** React, Django, Next.js, Node, Express, Tailwind CSS, SwiftUI, GraphQL, MySQL, PostgreSQL, Docker, AWS, Jenkins

## Experience

**Hometap** | **Full-Stack Engineering Co-op**

Jan 2024 – Jun 2024

- Revived database obfuscation package to **protect thousands of rows** of sensitive PII, financial information, and property details across **hundreds of db tables** by fixing **PostgreSQL** JSON serialization mismatch
- Developed website maintenance mode functionality **now used every sprint during deployment** by creating a dedicated **REST endpoint** and **WebSocket channel** between **Django** backend and **React** frontend
- Created management workflow to handle ordering, tracking, and canceling of **hundreds of home appraisals each day** by building **integration with 3rd-party API** hooked up to **React** tables/forms and **GraphQL** endpoints

**Wood Mackenzie** | **Software Engineering Co-op**

Jan 2023 – Aug 2023

- Built new data curation app and deployed to **production** from start to finish by spearheading development of **React** UI and **Node** API, generating **Jenkins** pipelines, and constructing **AWS** CDK stacks with ECS and Route 53
- Reduced page load times **from ~15s to ~3s** by designing new optimized endpoints for **Python** data microservice and writing Jira tickets to lead our data team in rebuilding them
- Streamlined code **~20%** by implementing “react-hook-form” library after convincing senior engineers of benefits
- Ensured code reliability by writing **90+ Jest tests** covering rendering, routing, events, and API requests/responses

**Wayland Student-Athlete** | **Co-Founder**

May 2020 – Present

- Founded local odd jobs business **generating \$62,000+ revenue** and **donating \$2,000+** to non-profit orgs to date
- Created website with job request form, email notification system, and full admin dashboard using **TypeScript**, **Next.js**, **React**, **Tailwind CSS**, **SQLite** to facilitate **800+ completed jobs** and **200+ served users** across **8+ towns**
- Scaled business by **leading team of 7 classmates** in communicating with clients and fulfilling job requests
- **Sold business** to younger group of high school students and mentored them for further growth

## Projects

**Shoots**

- **Invented mobile app** designed to motivate users and provide accountability in reducing screen time through friendly competition and potential rewards
- Developed **SwiftUI (Swift)** iOS frontend designed with **Figma** on top of **FastAPI (Python)** backend

**Big City Diner**

- **Rebuilt website** for local Hawaiian restaurant chain with **TypeScript**, **Next.js**, **React**, and **Tailwind**
- Leveraged **GraphQL-based content management system** to allow restaurant managers to add menu items, update location operating hours, and more on no-code platform
- Designed **color palette**, **typography**, **wireframes**, and **mockups** for site’s UI/UX with **Figma**

**MikMike**

**Photoshop**

- Designed **Java** photoshop program interactable through a **CLI** and **Java Swing GUI**
- Built **15+ color filters** and **blur**, **sharpen**, **brighten**, and **darken** operations on user image files
- Provided support for loading and saving **5+ image file types** (JPG, PNG, GIF, BMP, PPM)