# **NICHOLAS TIETJE**

ntietje1

in nicholas-tietje

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### **EDUCATION**

#### **Northeastern University**

Master of Science in Computer Science, GPA 4.0/4.0

Bachelor of Science in Chemical Engineering and Computer Science, GPA 3.7/4.0

Boston, MA Expected May 2026

Sept 2021 - May 2025

• Relevant Coursework: Foundations of Software Engineering, Software Development, Mobile Application Development, Object Oriented Design, Algorithms & Data, Database Design, Fundamentals of Computer Science I & II

### INTERNSHIP EXPERIENCE

#### **Software Engineer Intern**

Boston, MA

Fidelity Investments

May 2025 - Present

- Developing the money request and spending insight features in the flagship Fidelity android app for teen/parent users
- Suppressing various features and entry points in the Fidelity app to streamline the experience for teen users and increase engagement and retention

### **Software Engineer Intern**

Boston, MA

Northeastern University

Sept 2024 - Dec 2024

- Developed <u>GitMarks</u>, an industry-aligned educational platform that integrates standard GitHub workflows into classroom coding assignments, currently deployed in a pilot program across Northeastern University CS/DS courses
- Gathered requirements from professors, ensuring the product effectively met a robust set of academic needs & wants
- Enabled automatic student repository creation, assignment setup/distribution, submission deadlines, and grade-enabled pull requests with TA feedback through extensive integration with the GitHub API

### **Software Engineer Intern**

Boston, MA

State Street

Jul 2024 - Sept 2024

- Designed a scalable internal notification management system, enhancing communication efficiency of 3000+ users
- Collaborated with cross-functional teams to gather requirements, ensuring alignment with diverse user needs and strict financial industry compliance standards

### **Research and Development Intern**

Boston, MA

Nano-C

Jul 2023 – Dec 2023

- Optimized techniques for surfactant-free Single Walled Carbon Nanotube inks, improving R/T performance by 11%
- Developed novel chemical separation and purification methods to drive product refinement

### **CAMPUS EXPERIENCE**

### **Undergraduate Researcher**

Boston, MA

Computational Modeling in Chemical Engineering at Northeastern University

Feb 2024 – Jul 2024

- · Contributed to RMG-Py, an open-source computational modeling software, by developing features and code optimizations
- Led migration of output file format to YAML, improving cross-application interoperability and reducing execution time

### **Khoury Teaching Assistant**

Boston, MA

Northeastern University

Jan 2024 - May 2024

- Led mentorship of 250+ students in CS 3200 Database Design, delivering comprehensive support through Piazza discussions and one-on-one office hours
- Evaluated assignments, labs, and exams, offering constructive feedback to enhance student learning outcomes

#### **FYELIC Teaching Assistant**

Boston, MA

Northeastern University

Sep 2022 - May 2023

• Guided 200+ students in C++ programming and electrical prototyping with Arduino in the Cornerstone of Engineering course

#### **PROJECTS**

### LifeLinked: A MTG Life Tracking App 🔘 Github 🕨 Google Play 🗳 App Store

Kotlin, Compose/Kotlin Multiplatform, Gradle, Ktor, Koin, Android Studio, S3, Lambda, API Gateway

- Engineered and launched a cross-platform mobile app, attracting over 3000 installs across Google Play and App Store
- Leveraged Compose Multiplatform to share both native UI and back-end logic between iOS and Android platforms
- Adhered to Android/iOS design and quality standards by performing beta testing and applying clean architecture techniques

## **TECHNICAL SKILLS**

**Programming Languages:** Kotlin, Java, Go, Python, JavaScript, MySQL, PostgreSQL, SQLite

**Tools/Frameworks:** Git, Github Actions, Docker, Android, Express, MongoDB, React, Gradle, REST APIs

**Cloud Technologies:** AWS (RDS, S3, DynamoDB, Lambda, IAM, Cognito, API Gateway), Terraform