

# John Lavender

☎ +1 706 621 2819 | 📍 Athens, GA | @ johnmichaellavender123@gmail.com  
🌐 john-lavender.com | 🔗 linkedin.com/in/john-lavender | 🐙 github.com/JohnLavender474

## INDUSTRY EXPERIENCE

---

### Software Developer Intern

Atlanta, GA

McKenney's

Dec 2023 – Present, Full-time Hybrid

- Overhauled BuildingConnect app to improve the experience and security for **1000+** contractors:
  - Re-engineered permissions-based access logic within the **Node.js** server file to conform to changes in the transition from **Keycloak** version 11 to 23
  - Enhanced security by (1) requiring client secret for authentication, (2) forcing API requests through single client, (3) performing extensive permissions checks in-code, and (4) masking sensitive data from front-end
  - Rewrote **React.js** components from **JavaScript** to **TypeScript** to squash bugs and improve code quality.
  - Created **Docker** scripts to significantly improve the process of local testing and development.

### Backend Engineer Intern

Alpharetta, GA

Ware2Go

May 2023 – Aug 2023, Full-time Remote

- Aided in the long-term transition to the new Warehouse Management System (WMS) by rigorously rewriting **75+** functions to conform to the new logic.
- Transformed codebase of microservice from **TypeScript** to **Kotlin** to re-align logic with updated data models, improve code readability, and elevate unit tests coverage by **45%**.
- Enhanced **system security** by developing an in-code interceptor capable of serving as an HTTP interceptor, designed to filter out logs containing sensitive data from **DataDog**.
- Identified and resolved an issue pertaining to mismatch of data columns within **SQL** tables whose data was connected through in-code functions; this issue arose during the WMS transition.

## TEACHING EXPERIENCE

---

### CS Teaching Assistant

Athens, GA

University of Georgia

Aug 2023 – Dec 2023, Part-time In-Person

- Delivered lectures to **30+** students to enrich their understanding of **programming and design principles**.
- Reviewed assignments and offered **constructive feedback** to enhance student comprehension and performance.

### Peer Learning Assistant

Athens, GA

University of Georgia

Jan 2023 – May 2023, Part-time In-Person

- Guided students to grasp CS concepts, **fostering an understanding of the "why"** behind the code they wrote.
- Facilitated in-class Q&A sessions, helping students to bridge the gap between **theory** and **practice**.

## OPEN-SOURCE PROJECTS

---

### Object-Type Props in Tiled [Contribution] | Java, Android

[github.com/libgdx/libgdx/pull/7229](https://github.com/libgdx/libgdx/pull/7229)

- Contributed to **open-source LibGDX** project to add and test logic for supporting "object" prop type in *Tiled*.

### 2D Game Engine & Megaman Maverick | Kotlin, Maven, Kotest

[github.com/JohnLavender474/2D-Game-Engine](https://github.com/JohnLavender474/2D-Game-Engine) | [github.com/JohnLavender474/Megaman-Maverick](https://github.com/JohnLavender474/Megaman-Maverick)

- Built a game engine in **Kotlin** on top of the *LibGDX* game library to provide the **architecture** and **tools** necessary to develop 2D games for desktop and mobile platforms.
- Created an in-progress game with the *2D Game Engine* project; this showcases not only artistic endeavor but also application of OOP concepts like **separation of concerns**, **single-responsibility classes**, and **inheritance**.

## SKILLS

---

**Languages:** Kotlin, Java, TypeScript, JavaScript, SQL, HTML, CSS

**Technologies:** Node.js, React.js, Spring Boot, Git, Docker, Keycloak, Kafka, DataDog, Maven, JUnit, Kotest

**Methodologies:** Agile, Scrum, OOP, Functional Programming, DevOps, Unit Testing, Algorithm Analysis

## EDUCATION

---

### University of Georgia

Athens, GA

B.Sc. in Computer Science; **GPA: 3.5/4.00**

Jan 2020 – Dec 2023