PROFESSIONAL SUMMARY

* A Software Engineer with 10+ years of experience (Python, PHP, Swift, Kotlin, JavaScript, Shell Scripting, SQL, HTML, CSS, XML, JSON, NodeJS, ThreeJS, and more…)
* Experienced with applications including Android Studio, XCode, IntelliJ Idea, Nova, Textmate, Visual Studio Code, Apache, MySQL, PostgreSQL, SourceTree, GitHub, Cody from Sourcegraph AI plugin, Cursor, AugmentCode, Docker, and Vite build system.
* Recently built a 3D Tank Battle game using ThreeJS, Cannon.js, GSAP, Hammer, and a PHP backend and websocket server. <https://3dtankbattle.com>.
* Also, recently built a 3d web games directory in the style of an old Blockbuster Video Game Store. <https://3dwebgames.com> Powered by GitHub data source repo of 3d web games. Using ThreeJS and other frameworks. I have experience building a texture atlas system and npm build tools.

EDUCATION

* **Northeastern University, Boston, MA Dec. 2005**

Bachelor of Science in Computer Engineering with a Minor in Biomedical Engineering

RELEVANT EXPERIENCE

**Undercurrent**, **Remote 08/24 – Current**

**Senior Software Engineer**

* Utilized Kotlin and IntelliJ IDEA, working on a Signal messenger bot.
* Created an Android application for testing functionality internally using Jetpack Compose, MVVM, and Retrofit.
* Used Github, Slack, Jira, AWS

**GreenRobot LLC**, **Colora, MD 09/07 – Current**

**Software Developer/Owner**

* GreenRobot makes games and applications for social networks and mobile devices. These platforms include Web, iOS, Android, and Facebook. I am the owner of this LLC.
* Created many web apps, see details on the last page of the resume, or visit:
* <https://greenrobot.com/apps>
* Created many applications for Android (some are free versions of the same paid app or a different flavor of the same code). The apps are written using Kotlin, several Android frameworks, PostgreSQL, MySQL, PHP, and Python.
* Created many apps for iOS written in Swift, Objective-C, PHP, Ruby on Rails, MySQL, or PostgreSQL.
* GreenRobot has released some Laravel PHP open-source projects: an ad server and an ad network. I contributed to both projects. On the ad server, I was the sole contributor:
* <https://github.com/greenrobotllc>
* Contracted to build a Pregnancy Tracker app for Android called Pregnancy Companion. I worked remotely on this app with other developers
* Contracted by other clients for PHP/Python web development

**TrafficCast International, Inc., Remote 10/17 – 01/20**

**Software Developer**

* I implemented a Safe Driving Android SDK in Java and converted it to Kotlin.
* We used GitHub, Jira, Slack, and Google Hangouts to communicate remotely
* Knowledgeable about Frameworks and methodologies, including Material Design, OKHttp, Firebase, Parsing JSON using GSON, Timber, WebSockets, and REST calls with and without Retrofit
* I started as a contractor in October 2017 and was converted to a full-time employee after 30 days.
* Wrote tests in Espresso for integration tests, ui automation tests, as well as other tests using the command line and image processing tools.
* Helped team members debug problems with Kotlin, Swift and Objective-C.

**ChipIn, Honolulu, HI 09/06-09/07**

**Software Developer**

* Developed Chipin.com in Java and a Facebook app for ChipIn in Ruby on Rails, an online fundraiser site.
* Developed Facebook games: Vampires vs Werewolves, Pirates vs Ninjas, and others for ChipIn, which were later sold to BuddyMedia
* Developed Chipin.com admin site in PHP
* Technologies and Languages used: Java, MySQL, Ruby, PHP, JavaScript

**Oracle (Acquired ProfitLogic 08/05), Cambridge, MA 01/05 – 08/06**

**Application Developer**

* Applications Developer at Oracle working on a J2EE Struts-based web application for Retail Pricing Optimization. Tasks included designing and suggesting new features, fixing bugs, writing technical and functional design specifications, and automating the build process,
* Designed and implemented an addition to Oracle Retail's internal framework, adding XMLHttpRe- quest/Ajax capability for grid rendering, filtering, and dynamically updated messages.
* Technologies: Java, Ant, Struts, JSP, SQL, HTML, JavaScript, CSS, Perforce, and Shell scripting. Familiar with Weblogic Application server and Oracle database. Some familiarity with WebSphere and Oracle Application Server

**LTX, Westwood, MA 01/04 – 09/04**

**QA Engineer Co-op**

* Software Quality Assurance Engineer Co-op responsible for writing and maintaining automatic test suites, and automation scripts written using Perl, shell scripts, and more. Experience using Solaris, Clearcase, and Unix utilities

**Naval Surface Warfare Center, Philadelphia, PA 01-04/03 and 09-12/02**

**Software Engineering Co-op**

* Used ASP, MS SQL Server, Dreamweaver, and JavaScript. to develop applications to display and update information on products as received by RFID readers in XML format.
* Developed SOAP client and server to transmit, decode, and store shipboard binary data from ship to shore.

TECHNICAL PROFICIENCIES, AI, AND EXPERIENCE ON MY OWN

* Experience using Coolify, Linode Object Storage, Python Flask, and Docker to deploy a search engine for robots: <https://robots.greenrobot.com>
* Experience using and evaluating AI code generated from Cursor, Claude, Cody, and Augmentcode.
* Built a 3D Multiplayer Tank Battle Game using ThreeJS. <https://3dtankbattle.com>
* Built a 3d web games directory <https://3dwebgames.com>
* Developed <https://jobsearch.greenrobot.com> Web app, Android, iOS, and Mac apps searching thousands of jobs from VC-funded companies. Tech used: PHP, Python, JavaScript, jQuery, CSS, HTML, ChromeDriver.
* Developed <https://launchday.greenrobot.com>, a collaborative checklist for launching sites using NodeJS and Firebase hosting.
* AI: Used the Ollama Python library to generate text from keywords.
* Created Open Space iOS and Mac game with Testflight available: [https://openspace.greenrobot.com.](https://openspace.greenrobot.com) It's an open-source client game with a closed-source PHP WordPress Plugin backend.
* AI: Used Stable Diffusion from Python for text-to-image AI generation.
* AI: Used threestudio for text to 3d model generation, later upgraded to TripoSR.
* Created <https://wizardwriter.greenrobot.com>, an AI Article Generator, WordPress Auto blogger.
* Created [https://cartoonify.greenrobt.com](https://cartoonify.greenrobot.com), an AI cartoon generator using Linode connected to Redis queues connected to a GPU server in my office.
* Created [https://app.wordcraft3d.greenrobot.com](https://l.facebook.com/l.php?u=https%25253A%25252F%25252Fapp.wordcraft3d.greenrobot.com%25252F%25253Ffbclid%25253DIwAR2UrKRuz5k18e3zA3QGm3ui_pJWygdUZzJAloBroCg7nSn0a3lVWnIXl2k_aem_AbV1MnbhpeocAsCOeGBPQbtfmrhrXyF1Qb-Agibxd_NKrQy2a7fu8zYLfyfqOupIFbaiHhbzgezuGTRJMhMDitl9&h=AT0ajiHIvkX5hKDYzXpuNRkLJkfdH0BfqA45u06CljoJELTfW7WtdgYxMj_984n5er1jsTNosSiBYJd1dR3E2FGm6bpIhltRXwG4Xp_KsBh2uvwkv45XdkjLGDdSxDuYoe5BXw&__tn__=-UK-R&c%25255B0%25255D=AT3VwqgcFaM0m23WehmhZoCqua8TUU9a0dHSKYnHUel4nF2TqYFtLKhOdI-F6JlxsooQkQhqQrpgYhZNpYmfryf6aMuN3Lzq9aRov0C9Qi_5q_f7v-5d0iz7m_gOZgku8ZEFZ2dr9JTsLN3Orcc90a0oSIF3NZr1_eP_D1zMWYmQeDZnMIqk4gIe_H6nB5ct-codvDYp-cwVuPU) text to 3d model generation.
* Set up a Docker image to easily install all needed AI requirements for my text generator tool, image generator tool, image modifier tool, 3d object generator tool.
* Amazon S3: I utilized Amazon S3 to store files generated by Python and made them accessible to users of my applications.
* Experience with Google Gemini Deep Research, creating a lawyer directory from research report results at <https://mentalhealthlawyers.greenrobot.com>
* Experience with React building a site on Longevity using Deep Research: <https://longevity.greenrobot.com>
* I’m currently using Typescript along with React Native and React for an unreleased app.
* Experience converting Firebase to Supabase to use Google Sign In on a macOS React Native app.
* Experience using Coderabbit Pull Request Reviews. It improves the quality of code, and helps out as a solo developer. It catches important things that are sometimes missed.
* Created [https://feather.greenrobot.com](https://l.facebook.com/l.php?u=https%25253A%25252F%25252Ffeather.greenrobot.com%25252F%25253Ffbclid%25253DIwAR0OXQfduxkXqtr4xiSGTJuTa54KSzD3Ro-v2-PxBqEdzUKqVjXXb47D9ZQ_aem_AbVeIMnbDaqyqUwqDVX_O4TkwZJFb_k96Csp9r_BTBI2UBzF7ifmdLP6Fam5u4cRjx381vrNwYMgy0uFYW6PkCXs&h=AT1PmUBg8cYeRFjxzICDIsS4j0qzMSN92r7Yq0IUID3wCvugcAAY7YFOSyGdyC9VshBTqj4kX2ttU7LpfjJmJEcvRTN8FqJZsueQq5FfSDPvVQ1ougrDEfY0qTSQt8HRZqcx5A&__tn__=-UK-R&c%25255B0%25255D=AT3VwqgcFaM0m23WehmhZoCqua8TUU9a0dHSKYnHUel4nF2TqYFtLKhOdI-F6JlxsooQkQhqQrpgYhZNpYmfryf6aMuN3Lzq9aRov0C9Qi_5q_f7v-5d0iz7m_gOZgku8ZEFZ2dr9JTsLN3Orcc90a0oSIF3NZr1_eP_D1zMWYmQeDZnMIqk4gIe_H6nB5ct-codvDYp-cwVuPU), a financial advice for stocks website.
* I built an Android app to control: 1) A voice-controlled robot I built using a Raspberry Pi, 2) an HDMI IR TV input switcher for Apple TV and Android TV using voice control.
* I know Swift, Kotlin, PHP, Python, Javascript, Jquery, Adodb for PHP, Composer, Cocoapods, Gradle, XML, Linux, Java, Objective-c, HTML, CSS, Firebase, Firebase Analytics, Firebase Authentication, Firebase file storage, Google Login for PHP, iOS, Android, Apple Login in Swift, Interacting with REST APIs, Postman, Nova for mac, Xcode, Android Studio, Git, GitHub, SQL, Mysql, Postgresql, Sqlite, Asana, Jira, WordPress REST API, WordPress plugin development, WordPress plugins like site kit, jetpack, Oauth, Visual Studio Code, Bash shell scripting, Stripe subscription payments integration, Apache, OKHttp, Retrofit for Android, Twisted/Autobahn for Python web sockets.
* Code cleaning recommendations for Swift, Python3, PHP, Shell, and Android/Kotlin: I use and recommend:

-SwiftLint (“swiftlint” from cmd line, including “swiftlint autocorrect” and in XCode)

-Pylint (“pylint3” from cmd line)

-PHP CodeSniffer (“phpcs” from the command line, “phpcbf” from the command line for automatic fixes, and in Visual Studio Code on Mac OS X)

-ShellCheck (“shellcheck” from cmd line)

-Android Lint (From Android Studio)

* SwiftUI: I’ve used Swift UI components in my Open Space game for iOS/Mac, my Pirates game for iOS, the Job Search iOS app, and 3D Tank Battle iOS and Mac games.
* JetPack Compose for Android: I learned JetPack Compose because a library I wanted to use, SceneView, only supports Compose. I set up a project with JetPack compose, basic experimenting, and viewed a 3d object using the Scene of JetPack compose. Recently, I used Jetpack Compose for the Android version of my 3D Tank Battle Game, now on the Play Store.