

Mathew Tomberlin

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Portfolio: mathewtomberlin.github.io | **LinkedIn:** linkedin.com/in/mathew-tomberlin | **GitHub:** github.com/MathewTomberlin

Software Engineer with 4 years of experience in Java at a cloud-based enterprise software development company. Proven ability to write quality, testable code in a fast-paced team and startup environment. Highly motivated self-starter with a history of taking initiative to solve technical challenges and a record of mentoring junior developers and peers.

Skills	
Frontend	React, Redux, Javascript/Typescript
Backend	Java, PHP, Python, Spring, REST API, MySQL, Postgres
Software Design	Application architecture, user experience, user interface
Optimization	Code and Hardware Profiling and Debugging

Professional Experience

Software Engineer | Boeing Tapestry Solutions | 2019 – 2022

I modernized the ICODES cloud enterprise application frontend UI using React and Typescript and the backend using a Java Spring/Hibernate REST API with a Tomcat server and MySQL database. I was a founding engineer at Boeing ESI SaaS and I developed the Kafka data streaming backend used for warehouse automation. I directly contributed in the application architecture and user experience design processes of both ICODES and ESI projects. I mentored junior developers and peers in design patterns, object oriented principles, and open source technologies like Git and Jenkins to improve my team's quality and efficiency.

VR Software Engineer | HaptX Inc | 2022 – 2024

I designed, implemented and delivered a VR training demo product and features for in-development haptic VR glove hardware. I built an Unreal Engine application with a simple user experience designed for non-technical glove assemblers. The VR training I built won Best of Show at AWE 2024 and was praised by customers and conference attendees for its realism. During development and in production, I mentored colleagues and external developers on Unreal Engine, VR, and C++ best practices.

VR Game Developer | CSUMB Researcher | 2017 – 2019

I designed and implemented Gauntlet, a new VR input method for tracked hands. Published at IEEE VR 2017.

IEEE VR 2017 PDF: <https://mathewtomberlin.github.io/Gauntlet.pdf>

I developed Scalebridge, a therapeutic C# Unity game using an EEG headset. Presented at VS-Games 2019.

VS-Games 2019 PDF: <https://mathewtomberlin.github.io/Scalebridge.pdf>

Signals Intelligence Operator | United States Marine Corps | 2007 – 2012

I graduated from the Defense Language Institute with a fluency in Korean and was a fire team leader deployed with FBI and special operations teams operating electronic military signals intelligence equipment in dangerous environments.

Personal Experience

VR Lecturer | Cal Poly University

Lectured to students of Robert Crockett, the Dean of Engineering. Demonstrated VR and haptic glove hardware and discussed simulation architecture and design.

CG Engine | Open-Source C++ Scripting Engine

An OpenGL C++ scripting engine open-sourced for community use.

GitHub: <https://github.com/MathewTomberlin/CGEngine>

Block Breakout | Open-Source C++ Unreal Engine Game

Unreal Engine C++ game showcasing advanced shader programming and materials, open-sourced for community use.

GitHub: <https://github.com/MathewTomberlin/Breakout>

Education

Bachelor of Science in Computer Science | CSU Monterey Bay | 2016 – 2018