

BRM

FULL STACK DEVELOPER, PROJECT MANAGER

WEB DEVELOPMENT, HEALTHCARE TECHNOLOGY, GAME DEVELOPMENT BRANDON RIVERA-MELO

OBJECTIVE

Improve people's quality of life using software, project management, positive psychology, game design, and behavioral science.

SKILLS

Domains

Leadership, Emotional Intelligence, Project Management, Human-Centered Design, Business Administration, Software Architecture, DevSecOps, HIPAA Compliance, Database Administration, Full Stack Web Development, Game Development

Tools

Git, Docker, Unity, Gitlab CI/CD, Apptainer/Singularity, Node.js, Regex, AWS

Languages

CSS, HTML, TypeScript, JavaScript, C#, Java, Go, Python, C++, Bash, SQL

Frameworks

Spring Boot, Maven, Koa, JQuery, Vue3

Test Frameworks

JUnit, Selenium, Jest, NUnit, GoogleTest, AUnit, BATS

Other

REST API, MQTT, Mosquitto, Linux, Particle IoT, MySQL

EXPERIENCE

HEAD OF ENGINEERING • HEALTHTECH APPS, INC. • 2023.06 - PRESENT

MindKloud Journey – Porting a mental health journaling app to Unity for cross-platform, mobile compatibility on iOS and Android. Working with cloud-native AWS services including S3, Aurora, API Gateway, and Lambda for backend development.

SOFTWARE DESIGN ENGINEER, PROJECT MANAGER • UNIVERSITY OF UTAH • 2019.12 - PRESENT

Coordinated team meetings and developed health tech for 1 web service and 3 products:

1. **Tilt Tracker** – Led a 7-person, multidisciplinary team of Hardware Engineers, HCI Researchers, Doctors, and Advisors to make a *HIPAA-compliant*, full stack web service. Used custom IoT sensors to transmit data about power wheelchair user behavior, generate excel and PDF reports about pressure relief compliance via email and SMS, provide real-time feedback to improve compliance, and ultimately prevent pressure injuries. Wrote an NIH grant proposal. Used C++, SQL, Java, Node.js, Koa/Nunjucks, CSS, jQuery, Particle IoT platform, MQTT, Mosquitto, GoogleTest, AUnit, JUnit, Jest, Bash, Docker, and Gitlab CI/CD DevSecOps.
2. **AD with Sam** – Led a 9-person, multi-disciplinary team of Rehab Educators, Occupational Therapists, Technical Artists, doctors to create an immersive hospital exhibit about Autonomic Dysreflexia for clinicians and people with spinal cord injury. The project uses projection mapping, animated physiology, surround sound, networked RGB lighting, and narrative design. I chose the technology, ran meetings, wrote the narrative, and narrated it.
3. **Bobby the Bladder** – Led a 5-person, multi-disciplinary team of Rehab Educators, Occupational Therapists, Technical Artists, and doctors to create an educational, interactive, web-based story about bladder management for people with spinal cord injury.
4. **NRH Control UI** – Led a 5-person, multi-disciplinary team UI Artists, UI Programmers, IT Managers, Occupational Therapists, and HCI Researchers to develop the UI design for a first-of-its-kind app for patients, family members, and hospital staff to control all room amenities including lighting, blinds, temperature, media, doors, and elevators at the Craig H Neilsen Rehabilitation Hospital.

SOFTWARE ENGINEER II • AGE OF LEARNING • 2018.05 – 2019.09

ABCmouse mobile – Contributed to 27 app updates for the product for iOS and Android with Unity, optimized load times, integrated Leanplum for A/B tests and analytics, integrated the Mastering Math product, supported the Google Play Store 64-bit publishing requirement, coordinated the project upgrade to a newer version of Unity, built asset bundles for various assets. Worked with Unity, C#.

TECH LEAD, PROJECT MANAGER • HATHOS INTERACTIVE • 2017.01 – 2018.05

Clawface – Led an engineering team of 6 on a team of 16 to develop an arcade-style, twin-stick shooter with a level editor, Steam Achievements, and Steam Workshop level uploads. Coordinated with the Art and Design leads, defined engineering sprint tasks, ran user

observations and interviewed playtesters, architected the codebase, set coding standards, wrote the enemy wave generation logic, and contributed to the level editor in Unity and C#. We published the game to Steam with Very Positive reviews and 45,000+ downloads.

TECH LEAD, PROJECT MANAGER • INDEPENDENT • 2016.09 – 2017.08

Derpy Dinos – Led a 6-person team to develop a 2.5D side-scrolling arcade shooter with Steam Achievements. I defined tasks with animators, 3D artists, sound designers, and music artists. I architected and wrote the entire codebase, co-designed the game, and ran playtesting sessions. We used Unity and C# and published to Steam with 25,000+ downloads.

FULL STACK DEV, PROJECT MANAGER • THE GAPP LAB • 2016.06 – 2018.05

Tilt Tracker – Led a 5-person, multidisciplinary team of Hardware Engineers, Doctors, front-end web developers, and advisors to prototype the same full stack web service listed above. Used Unity, C#, SQL, Java, Node.js, Koa/Nunjucks HTML data injection templating, & jQuery.

EDUCATION

AWS CERTIFICATES • 2023.06 • AWS

Certified Cloud Practitioner

UDEMY CERTIFICATES • 2023.05 • UDEMY

Working with Vue 3 and Go (Golang), Certificate of Completion

MASTERS OF BUSINESS ADMINISTRATION • 2022.08 • UNIVERSITY OF UTAH

GPA 3.98, Graduate Certificate in Information Systems

MASTERS OF ENTERTAINMENT, ARTS, AND ENGINEERING • 2018.05 • UNIVERSITY OF UTAH

GPA 3.83, Emphasis in Game Engineering Production

UNITY3D & C# GAME DEVELOPMENT CERTIFICATE • 2015.12 • DAVINCI CODERS

11-week certificate program

BS: BIOMEDICAL ENGINEERING, PSYCHOLOGY • 2013.03 • NORTHWESTERN UNIVERSITY

GPA 3.59, Certificates in Human-Centered Design and Entrepreneurship; Pre-med

