Ryan Cross

[Employment]

Sr. Software Engineering Consultant, Tech Nawar

April 2024 - Present

- Building advanced features with Typescript and React to serve a seamless satellite message communication app.
- Created a comprehensive design for a video game project, translating broad client requirements into a structured, detailed plan covering gameplay mechanics, user interface, technical architecture and development timelines.

Senior Software Engineer, Zero Tech

December 2021 - April 2023

- Architect and lead engineer of the ZERO Data Store, a distributed, large scale system of data aggregation & transformation which serves as the primary data provider for an NFT Marketplace of in-game items.
- Leveraged a stack of Typescript, NodeJS, Azure and MongoDB to create a robust, scalable backend that processed thousands of events per second to provide a simple, queryable API with 300% faster response times.
- Saved 30 developer hours a month on software release activities by engineering infrastructure-as-code tooling to automate the deployment and configuration of multiple services at once, including Azure Event Buses, APIs, Node Applications and Mongo Clusters.
- Wrote Solidity contracts to manage the sale of a collection of NFTs on the Ethereum blockchain, with support for features including purchase allowance, queryable sale status, role based authorization of sale execution, and automated sale execution.

Senior Software Engineer, Oracle Cerner

September 2018 - December 2021

- Awarded "2018 Quality Champion of the Year" by Cerner for commitment to quality and process improvement.
- Created multiple Java APIs to solve difficult problems in the health domain; including synchronizing user preferences across multiple applications, and health information verification from 3rd party systems.
- Developed and managed a React application that coordinates patient schedules for care teams.
- Designed and executed performance tests via Gatling in order to profile the performance, load balancing and user experience of various REST APIs.

Software Engineer, Oracle Cerner

August 2016 - September 2018

• Implemented enhancements and corrected defects in multiple Javascript based apps utilizing different frameworks that included React and AngularJS.

[Expertise]

Languages: Typescript, Javascript, C#, Java, NoSQL, SQL, HTML, CSS,

Technologies: Node, React, Figma, Azure, .NET, Unity, Godot, Ethereum, Angular, MongoDB, GraphQL, Infrastructure as Code (Pulumi, Terraform), Git, Eggplant

[Projects | Volunteer]

Creator, Godot-WFC 2024

• Wrote a Godot 4 tool that synthesizes 2D terrain from sample images by implementing a quantum mechanics inspired Wave-Function Collapse algorithm.

Creator, Syncopath 2023-2024

• Designed and developed a game that trains your rhythm by measuring your proximity to perfect beat input over time, given a specific BPM, and provides a visually appealing feedback system for improvement.

QA Engineer, Skywind 2020-2021

• Extensive landscape and quest testing for the high profile Skyrim mod project: Skywind, which aims to reimagine Morrowind in Skyrim at very high production value and quality.

[Education]

University of Missouri, Columbia

July 2012 - May 2016

Bachelor's of Science in Information Technology (Honor's Scholar)