

Ryan Cross

[Employment]

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- 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]

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- 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*)