

Matthew Mabrey

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Experience

World of Warcraft - Blizzard

Jan. 2022 - Present

Software Engineer, Mar. 2023

Associate Software Engineer, Jan. 2022

C#, C++, Java, SQL | .NET Framework, Microsoft Entity Framework, Jenkins, Grafana

- Developed and executed large scale automated testing to validate client & server performance.
- Coordinated with other subteams to automate testing of game features and systems using headless clients.
- Enhanced Continuous Integration systems to improve reporting, testing, and build stability.
- Implemented headless clients for an upcoming unannounced title to enable automated testing prior to launch.
- Awarded the top (Game Changer) performance review for contributions during 2022.

World of Warcraft - Blizzard

May - Aug. 2021

Software Engineer Intern

C#, SQL | .NET Framework, Microsoft Entity Framework, Grafana

- Implemented AI logic to enable headless clients to prioritize and complete in-game objectives.
- Created tests to verify game rewards for upcoming game content.
- Visualized large amounts of game reward data on a Grafana dashboard to help automate QA testing.

Green TCNJ Environmental App

Aug. 2020 - May 2021

Web App Developer

JavaScript, Typescript, HTML, CSS, PHP, SQL | Ionic, Angular, MySQL, MariaDB, Apache

- Created a cross platform mobile application for The College of New Jersey's environmental and recycling initiatives.
- Implemented the back-end functionality needed for recycling guidelines, environmental events, and relevant news.
- Assisted my team in building the front-end mobile application and admin portal to display and manage database information.

Education

The College of New Jersey (TCNJ)

Dec. 2021

Bachelors of Science, Computer Science

- **Cumulative GPA:** 4.0/4.0
- **Dean's List:** 8/8 Semesters
- **Honors:** Summa Cum Laude, TCNJ Computer Science Award, and the UPE Computing Honor Society
- **Relevant Courses:** Software Engineering, Data Structures, Analysis of Algorithms, Artificial Intelligence, Computer Networking, Computer Architecture, Operating Systems, Calculus II, 3D Game Development

Projects

AI Game Solving Agent

Mar. - May 2020

Python | NumPy, PyGame, Python Arcade Library, PyCharm

- Used Python to create a rational game solving agent for a 2D retro arcade game.
- Designed the agent to avoid obstacles and adversaries while collecting targets in as little time as possible.
- Engineered the only agent in the course to complete all 10 levels without losing any lives and achieving a near-optimal score.

Demolition Derby Game

Jun. 2019 - Aug. 2020

C# | Unity Engine, Microsoft Visual Studio, Photon Networking, Blender

- Independently created a fully functional 3D multiplayer video game with the Unity engine.
- Utilized object-synchronization and network events to synchronize remote clients.
- Experimented with game mechanics, physics, level design, and VFX to develop a competitive last-person-standing car game.

Skills

Programming Languages: C#, C++, C, Java, Groovy, Lua, PHP, SQL, HTML, CSS, JavaScript, TypeScript

Tools, Engines, Frameworks, & Libraries: .NET, Jenkins, Unity, Unreal, Photon, Blender, Angular, Ionic

Expertise: Automation, Continuous Integration, Game Development, Artificial Intelligence, Asynchronous Programming