Zed Ikejiani
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Portfolio - https://mrrobotioi.github.io/home/ | GitHub - https://github.com/MrRobotIOI | LinkedIn - https://www.linkedin.com/in/zed-ik/

Experience

RBC Borealis (Data & AI Research Division, RBC) **Sep 2024 – Present**
Developer Co-op

- Collaborating with Principal Engineers and Leads at RBC Borealis to deliver consumable, micro and platform services for internal RBC applications.
- Working on multiple data protection services that identify Personal Identifiable Information and encrypt it, preserving certain data formats to allow readability while ensuring anonymity.
- Assisting in getting services from the development environment to production using OCP4, GitHub and Helios, RBC's in-house portal for deploying application.
- Worked on a synthetic data generation service to improve/train AI models, protect sensitive data, and reduce data bias

Elle Hacks **Sep 2021 – Feb 2022**
Full Stack Web Developer

- Developed a tool to that helps medical practitioners get diagnoses by matching a set of symptoms to illnesses and health conditions.

Education

York University **Sep 2021 – Present**
Bachelor's Degree in Digital Media
Courses: Object Oriented Programming, Data Structures, Shell Scripting, Game/Web Development

Sheridan College **Jan 2020 – Jun 2021**
Diploma in Computer Programming

Projects

Lead Developer, "Insomnia" - Link to Project

- Worked with a team to create a first-person 3d adventure game with time mechanics and presented it to industry professionals.
- Developed using Unity using C# and Object-Oriented programming concepts such as Polymorphism and Inheritance for obstacle variants.
- Oversaw project milestones, directed technical implementation, and ensured cohesive integration of gameplay features, mechanics, and level design. Additionally, managed team dynamics.
- Implemented optimization techniques, improving performance by approximately 40%.

Newtonian Gravity - Link to Project

- Developed Newtonian gravity mechanics for realistic planetary movement in Unreal Engine, enabling players and objects to be attracted to a planetary body, including a flight system that can transition from planet to space.
- Modified UE5's destruction system to allow for directional gravity on destroyed geometry collections.

Procedural Snow System- Link to Project

- Developed a snow accumulation system that functions at both the material level, using shaders, and the mesh level, through dynamic meshes with adjustable variation via noise and displacement textures. Additionally, created a convenient tool for converting the dynamic snow meshes into static meshes.
- Implemented a real-time, persistent landscape deformation system that captures player movement using render textures and virtual texture volumes simulating movement through snow, including Snow particle collision using distance fields.

Technical Skills

- Languages: C++, C#, Java, HTML, JavaScript/TypeScript, CSS, C, Bash, SQL/NoSQL
- Tools: Git, MongoDB, PostgreSQL, UE5, Postman, JUnit, and Linux.