Bryan Bai

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SKILLS

Languages	C/C++, C#, JavaScript, GLSL/HLSL
Backend/Database	Node, Express, MySQL, MS SQL Server
Graphics/GPGPU	Unity3D, OpenGL, WebGL, DirectCompute, CUDA

EXPERIENCE

Co-Founder & CTO   **VNovus**   **Oct 2016 - Apr 2018**

VRPlayin – Virtual Reality Experience Centre
- Launched VRPlayin, one of the top Virtual Reality arcades in Toronto
- Created a first-of-its-kind end-to-end VR arcade management platform, enabling the store to operate almost fully autonomously, saving 100k+ annually on operation costs
- Led a cross-discipline team of 5 on the development of a VR dashboard application [Unity3D, OpenVR SDK]
- Designed and built back-end systems for facilitating online booking, content management, VR station management, session tracking and logging/reporting [Node, Express, MySQL, Socket.io]

Project R – VR Sculpting to 3D Printing
- Prototyped a VR sculpting software for creating 3D printable models [Unity3D, DirectCompute]
- Developed a compute shader based SDF sculpting engine with higher resolution and better performance than existing VR content creation tools
- Pitched this project to various parties and gained significant interests from the STEM education community

Software Engineer   **Mi9 Business Intelligence**   **Apr 2015 - Apr 2016**
- As a member of the core backend team, worked on enhancements and optimizations for the Mi9 retail management system which is used by clients like B&H, Nike and Vans [VB.Net, MS SQL Server]
- Overhauled the data interface for communicating with third-party systems, convinced management to adopt the industry standard ARTS data model, potentially saving 50+ hours of work on future development

District Sales Manager   **Beijing Zhong Lian Bian Yuan Health Tech**   **Feb 2009 - Mar 2013**
- Closed a major client (Beijing No.3 Hospital) and became the youngest sales manager in the company

PROJECT

Minicards Toronto Android App [Java, Node, Express, MySQL]   **2018**
- Contract work of developing an Android app that allows users to scan QR codes to get deals for local venues

VR Scout [Node, Express, MySQL]   **2017**
- A web tool that scrapes Steam store pages for VR content and generates suggestions based on user reviews

Cubey [C++, OpenGL]   **2015**
- A custom-built OpenGL rendering engine mostly used for writing compute shader demos

EDUCATION

Sheridan College, Oakville, ON   **2013 - 2014**
College Graduate Certificate [Advanced Game Programming]

Beijing Normal University, Beijing, China   **2004 - 2008**
Bachelor of Science [Biology]