Benjamin Chislett

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`https://github.com/benchislett`

Profile

First year Computer Science student with a thirst for knowledge and a passion for learning. Skilled programmer with experience in full-stack development, research, and artificial intelligence.

Key Competencies: CUDA/C++ | GPU Computing | Python | node.js | AWS | Machine Learning
Agile | Problem-Solving | Work Ethic | Adaptability | Communication | Teamwork | Organization

Experience

Research Intern   *Jul 2019 - Sep 2019*
Okinawa Institute of Science and Technology, Okinawa Prefecture, Japan
- Maintained GPUE: a CUDA/C++ application for simulating Bose-Einstein condensates
- Authored GPUE.jl: a Julia-GPU implementation of GPUE

Software Developer   *Sep 2018 - Jul 2019*
Mysa Smart Thermostats, St. John's, NL
- Maintained a full stack javascript application for browsing and updating an AWS backend
- Developed a query library for interacting with AWS through object-oriented abstractions

Projects

Convolutional Autoencoders for Image Compression
- Researched machine-learning and computer vision techniques
- Developed a novel image compression algorithm using convolutional autoencoders and data compression

Evolutionary Algorithms for Polygonal Approximation of Images
- Implemented meta-heuristic optimization of image approximation with hill-climbing genetic algorithms
- Used low-level image rendering APIs to create live video output over time

GPU-Accelerated Ray Tracer
- Designed and implemented an accelerated path tracer in CUDA with support for triangle meshes, materials, textures, lighting, and more.

Education

Honours Bachelor of Science, Computer Science   *Sep 2019 - Present*
University of Toronto Scarborough, Scarborough, ON
- Cumulative GPA: 4.00