

Benjamin Chislett

1295 Military Trail, Toronto, ON, M1C 1A4

benjamin.chislett@mail.utoronto.ca

<https://github.com/benchislett>

Profile

Computer Science student with a thirst for knowledge and a passion for learning. Skilled programmer with experience in full-stack development, research, computer graphics, 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