Daniel Taylor

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Objective

Creative, disciplined programmer seeks opportunity to use my skills to develop business solutions or create solutions in the area of computer graphics.

Education

George Mason University

B.S. in Computer Science   *C/O 2018*

Appomattox Regional Governor's School for the Arts and Technology

Advanced Diploma, Focus in Technology   *C/O 2014*
- Extracurricular activities included: iris tracking and computer vision, path tracing for global illumination, and video game tech demos
- Participated in technology expo presenting video game tech demos
- Placed in VCU programming competition 2 years

Projects and Products

Computer Graphics   *December 2013 – Present*
- Global Illumination (C++ and CUDA)
  - Implemented BVH and k-d tree implementations for space partitioning
  - Features microfacet BRDF, with importance sampling
- Computational Origami (C++)
  - Developed a novel folding algorithm that renders a real-time wireframe of finished model
  - Developed a working auto-complete technique
- Tools for Persons with Epilepsy (C++, Windows)
  - Currently in development
  - Developing a crude, first line of defense against photosensitive epilepsy

Computational Physics   *January 2015 – Present*
- Fluid dynamics (C++)
  - Implemented Eulerian and Lagrangian simulations
- Non-Euclidean Rigid Body Physics Engine (Java)
  - Based on Little Big Planet's (PS2) physics engine
  - Extended to use coulomb friction

Employment

Little Caesars LLC   *July 2012 – Present*
Crew member   *Hopewell, VA*
- Created a scheduling program to help create dynamic weekly schedules for manager
- Basic teamwork and coworker management
- Trained a majority of the crew members on working the oven