Jeffrey Young

Master's student in computer science specializing in robotics and AI

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Employment History

Photonic Corp: August 2013 - May 2014

- *Analyzed performance of a novel computer architecture running DoD benchmarks*
- *Simulated effectiveness of different routing algorithms for SMP machine in C++*
- *Evaluated performance benefits of including GPUs in novel architecture using CUDA C++*

UC Berkeley Combustion Lab

- *Evaluated effect of microwaves on methane combustion at lean flammability limit*
- *Wrote image processing software in Matlab and ImageJ to automate extraction of combustion data from high speed camera footage*

UC Berkeley Tennis Dynamics Lab

- *Evaluated effect of variables such as string type, tension, and racquet material on impact spin generation*
- *Assisted in writing image processing software in Matlab to automate data collection*

Education

Georgia Tech

- *MS in Computer Science*
- *August 2014 - June 2016 (expected)*
- *Specializing in AI and Robotics*

UC Berkeley

- *BS in Mechanical Engineering*
- *August 2009 - December 2012*
- *Drake Scholarship Recipient*

Projects

GTthreads

- *POSIX-Compliant user-level threading library*

- *Emulates functionality of pthreads library*

OpenMP/MPI Barrier

- *Custom barrier implementations for OpenMP/MPI in C*
- *Performance analysis with different architectures and usage patterns*

Raven's Matrices

- *Python program to solve Raven's Matrices*
- *Visual analogy problems used in IQ tests*

UCB Bionic Knee

- *Created a replacement knee joint for evaluation in UCB's DARPA-funded exoskeleton project*
- *Automated using an Arduino collecting data from IMU-3000 accel/gyro*

Skills

Programming

- *C/C++*
- *CUDA/OpenMP/MPI*
- *Python/Matlab*
- *LabView*
- *Android*
- *Arduino*
- *HTML/CSS*

Other

- *Mechanical Design - Solidworks/Inventor*
- *Stress and Thermal Analysis - Comsol*
- *Automotive Maintenance*
- *Computer Building and Case Modding*