**RESEARCH INTERESTS**

Computer Graphics, Computer Vision, Parallel Computing, Data Science, Artificial Intelligence

**EDUCATION**

**B.S. Computer Science**, (Applied Mathematics and Computer Science Double Major) May 2023 – University of Kentucky, 3.90 GPA

**RESEARCH EXPERIENCE**

Undergraduate Research Assistant, Dr. Peng Wang’s Augmented Intelligence for Smart Manufacturing Lab, University of Kentucky, January 2021 – Present

Undergraduate Research Assistant, Dr. Guoqiang Yu’s Biomedical Optics Lab, University of Kentucky, March 2020 – October 2020

Principal Investigator, Research into Volumetric Rendering Using Probabilistic Density Functions, Self-Guided, Informally Advised by Dr. Peter Shirley (NVIDIA). March 2021 – Present

**INDUSTRY EXPERIENCE**

Twitch Interactive – Video Streaming Engineering Intern May 2021 – August 2021

Intel Corporation – Controller Integration Engineering Co-op October 2020 – May 2021

**PUBLICATIONS**

***Primary Author***

Green, Brennen, et al. *High-Speed Imaging of Cerebral Blood Flow Using Parallel Computing on the Graphics Processing Unit*. Biomedical Engineering Society Annual Meeting, 2020

***Secondary or Tertiary Author***

Mohtasebi, Mehrana, et al. *“Noncontact Optical Assessment of Spontaneous Low-Frequency Fluctuations of Cerebral Blood Flow in Neonatal Intraventricular Hemorrhage”* Society of Photo-Optical Instrumentation Engineers Photonex + Vacuum Expo, 2020.

**CONFERENCE PRESENTATIONS**

2020, Brennen Green, “High Speed Imaging of Cerebral Blood Flow Using Parallel Computing on the Graphics Processing Unit” Biomedical Engineering Society Annual Meeting and Commonwealth Computation Summit, Virtual.

**RELEVANT COURSEWORK**

Numerical Methods, Intermediate Computer Graphics, Artificial Intelligence, Machine Learning, Optimization, Probability, Statistics, Linear Algebra, Calculus 1-3, Differential Equations

**HONORS / AWARDS**

University of Kentucky College of Engineering Dean’s List (Fall 2019-May 2023)

University of Kentucky College of Engineering Scholarship (2020-2021)

**SERVICE**

Computer Science Outreach Chair, Engineering Outreach Board (2019-2020)

**MEMBERSHIPS / AFFILIATIONS**

Association of Computing Machinery

Biomedical Engineering Society

**SKILLS**

Languages: C++, C, Python

Frameworks/Software: OpenGL, Unity, MATLAB, Jupyter Notebook, Torch, NumPy, CUDA