

# Mark Jarzynski

8103 Windy Trl  
Millersville MD, 21108  
(443) 286-4637

mark.jarzynski@gmail.com  
markjarzynski.github.io  
twitter.com/markjarzynski

## Education

Ph.D. (in progress)	Computer Science; University of Maryland, Baltimore County	present
B.S.	Computer Science; University of Maryland, Baltimore County	2011

## Work Experience

**Technical Director** 2014 - present

University of Maryland Baltimore County, Imaging Research Center

- Supervised, led, and educated teams of students and staff on research projects.
- Lead Developer on research projects, which often involve combinations of the following:
  - VR, AR, MR
  - Unreal Engine / Unity
  - 3D Scanning / Photogrammetry
  - Motion Tracking / Motion Capture
  - Data Visualization and Procedural Generation
  - Parallel Computing
- Maintained department's infrastructure, servers, desktops.

**Systems Administrator & Programmer** 2011 - 2014

University of Maryland Baltimore County, Imaging Research Center

- Developed and maintained mission critical software to meet research needs.
- Worked with students to ensure researcher needs were being met.
- Maintained department's infrastructure, servers, desktops.

**UNIX Administrator & Web Developer** 2010 - 2011

University of Maryland Baltimore County, Computer Science & Electrical Engineering

- Maintained CSEE linux desktops and servers across classroom labs and TA rooms.
- Designed and developed department's website.
- Kept up to date documentation on methods and processes.

**Programmer** 2008 - 2010

Zeroed-In Technologies LLC

- Developed and maintained multiple websites in Php and ColdFusion
- Met with clients and scoped out their needs. Estimated time and costs.

## Technical Skills

Languages:	C, C++, C#, Python, Java, Php, HTML, CSS, Javascript, HLSL, GLSL
Graphics APIs:	DirectX, OpenGL
Game Engines:	Unreal Engine, Unity
Operating Systems:	Linux, macOS, Windows
Databases:	MariaDB, MySQL, MSSQL, Postgres, Oracle
Software:	Visual Studios, XCode, CMake, Makefiles, GCC, LLVM, Git, Subversion, CVS, Mercurial, Apache, NGINX, Docker

## Publications

Mark Jarzynski and Marc Olano, Hash Functions for GPU Rendering, *Journal of Computer Graphics Techniques (JCGT)*, vol. 9, no. 3, 21-38, 2020

Available online <http://jcgt.org/published/0009/03/02/>

Mark Murnane, Don Engel, Stephen Freeland, Lee Boot, Mark Jarzynski, Katrine Lindvig, Line Hillersdal, and David Earle. 2020. Extending CoNavigator into a Collaborative Digital Space. *In Companion of the 2020 ACM International Conference on Supporting Group Work (GROUP '20)*. Association for Computing Machinery, New York, NY, USA, 127–130.

DOI: <https://doi.org/10.1145/3323994.3369890>

## Awards

2006      Eagle Scout. Boy Scouts of America. Troop 447.