Peter Mocarski

(847) 596-1304 | pmm248@cornell.edu | www.pmocarski.com | peter-mocarski

Education

Cornell University — *Ithaca, NY*

Master of Engineering, Computer Science — *2017 - 2018*

Cornell University — *Ithaca, NY*

Bachelor of Science, Computer Science, 4.0/4.0 — *2014-2017*

- Summa Cum Laude

Work Experience

Optiver — *Chicago, IL*

Software Developer, Intern — *Summer 2017*

- Part of the Futures Automated Trading team, responsible for developing low-latency, high frequency trading systems
- Parallelized an end-to-end testing framework to increase performance while ensuring safe concurrent execution of processes
- Worked in Python and C++

Intentional Software (acquired by Microsoft) — *Bellevue, WA*

Software Developer, Intern — *Summer 2016*

- Part of the Layout and UI Assets team
- Implemented and demoed an integrated date picker tool in C# with multi-dimensional animations, gesture recognition, and customizable visual themes
- Heavy focus on layout optimization, with integration of lazy evaluation and tree-based caching

Teaching Experience

Department of Computer Science, Cornell University — *Ithaca, NY*

Graduate Teaching/Research Specialist — *2018-Present*

- Member of course staff for CS4700 (Artificial Intelligence) and CS4701 (Practicum in Artificial Intelligence)
- Lead office hours, organize review sessions, and provide instruction support
- Administer exams and grade student submissions

College of Engineering, Cornell University — *Ithaca, NY*

Teaching Assistant — *2015 - 2017*

- Member of course staff for CS4820 (Algorithms), CS4320 (Database Systems), and ECE2300 (Computer Organization)
- Led lab sessions and office hours
- Administered exams and graded student submissions

Projects

PRAC-MAN 3D — *Cumulative Course Project*

Co-Creator (4 Person Team) — *Spring 2017*

- Web-based 3D implementation of PAC-MAN themed as a fast-paced horror game
- Implemented in WebGL and JavaScript

Ray-Tracing Image Renderer — *Cumulative Course Project*

Co-Creator (2 Person Team) — *Spring 2017*

- Simulates the way photons propagate through space, aiming to produce photorealistic computer-generated images
- Renders shadows, optical effects, textures, multiple shading models, and surface materials such as glass and metal
- Implemented in Java

Skills

Languages & Technologies	Python, Java, C#, Ruby, OCaml, WebGL, JavaScript, LaTeX, Git
Practical	Graphics, Artificial Intelligence, Natural Language Processing, Machine Learning, Databases
Theoretical	Algorithms, Cryptography, Functional Programming, Applied Logic, Networks II
Hardware-Oriented	Operating Systems, Embedded Systems, Digital Logic and Computer Organization