

willy nolan

Los Angeles, CA 90048
E: willy@willynolan.com

Interests

- Sound synthesis
- Pop culture of the 1980s
- Travel

experience

Software Engineer

The Madison Square Garden Company
(MSG)

San Francisco, CA May 2018 - Present

Research and create technical solutions for the new MSG Sphere venue.

Develop simulation and visualization software used by multiple teams.

Maintain large, legacy code bases.

Software Engineer

Obscura Digital (Acquired by MSG)

San Francisco, CA June 2015 - May 2018

Engineered software for some of the biggest interactive installations and audio-visual events in the world.

Developed computational photography and video projection software.

Worked to improve documentation and software development practices.

Instructional Associate

Georgia Institute of Technology

Atlanta, GA December 2019 - August 2020

Assisted in teaching a graduate-level course on computer networking.

Developed new course material and conducted live office hours with students.

Software Engineer

Madrone Studios

San Francisco, CA March 2014 - June 2015

Designed and developed large-scale visual and interactive installations locally and internationally.

Provided technical guidance during concept design and content creation.

Software Engineer

NightWalker Clothing

Portland, OR August 2013 - March 2014

Wrote the entire codebase for the company's flagship MEAN stack application. Handled all application deployment, monitoring and maintenance.

skills

Software

Python

Javascript

C++ and C#

OpenGL and WebGL

HTML and CSS

Applications

TouchDesigner

Unity

Git

Other

All operating systems and shells

Networking, protocols and data formats

High-end graphics cards and projectors

education

M.S. Computer Science

Georgia Institute of Technology, 2020

Specialization in Computational Perception and Robotics.

Studied machine learning and computer vision as it applies to robotics, signal processing, finance and art.

M.S. Journalism

The University of Southern California, 2013

Specialization in Broadcast and Digital Journalism.

Made extensive use of web technologies for journalism.

B.S. Communication Studies

Portland State University, 2010

Studied social media and emerging communication technology.

projects

- Show control system at AT&T Stadium
- Social Canvas at MGM Cotai
- Video projections at Shantou University

These and other projects and research that can be shared publicly are documented at willynolan.com