# MADISON DICKSON

### EDUCATION

Worcester Polytechnic Institute, Worcester, MA

B.S. in Computer Science - Specialization in 3d Graphics

#### Minor in Mechanical Design & Simulation Graphics

MQP: "Photo-Realistic Shader Effects", Project Manager of 18-man software engineering course, Resident Advisor for 3 years, Founder & president of the Japanese club

# PROFESSIONAL EXPERIENCE

Square2 Systems, Hanover, NH 2015-present
Contractor:

- Designed UI/UX patterns to transition the Behaviorial Health tool from web to mobile app
- Developed company website to attract pre-release interest
- Created build scripts and Cordova based native app wrapper
- Designed & built grant-funded Opioid Addiction Awareness website for teens, with accompanying study tracking tool

#### Fidelity Investments, Merrimack, NH Android Developer:

 Voice interaction designer/developer & speech grammar analyst, released with 4% organic user engagement in 4 days.

- Developed and supported core features
- Assessed vendors, researched tools and libraries for solutions to requirements and features
- Developed rapid prototypes for UXD and Usability testing
- Maintained Windows phone application
- Analyzed and developed the Mobile bill pay POC

#### Systems Analyst:

- Performed 3-month off-shore assignment in Dalian, China; developed international team strategy and pioneered extended business trip best practices.
- Collaborated with product owners to develop Tap-to-Call feature
- Designed and built a self-initiated OTA build installer platform, to ease QA and business testing and enhance daily productivity.
- Took on extra design projects from the UXD team to help meet deadlines

#### Associate Systems Analyst:

- Analyzed, designed, and assisted building Windows Phone prototypes for proof of concept project
- Lead Analyst on UI redesign for iPhone and Android apps
- Prototyped new documentation formats and strategies
- Helped transition to and adopt Agile methodologies, coached business partners in new practices
- Organized social events for new college-graduate employees

# HIGHLIGHTS

#### Creative:

2011

The **HoloGlass** theme for Android has over 400k downloads and a 4+ star rating, receiving consistent comments of "Beautiful" and "Best theme on Google Play."

#### Self Driven & Focused on Efficiency:

Seeing an opportunity for improvement, I built an OTA build installer after-hours, to make QA testing daily changes easier, teaching myself the tools as I went. Now saves more than 30 man-hours a week.

# Co-founder of Service Learning program:

NextGen Academy, originally in Seattle WA, is a gap-year program that focuses on developing leadership skills through participant-run community service projects worldwide. I designed PR material and built their first website, and fundraised for our successful school restoration project in the Dominican Republic.

Major Qualifying (Senior) Project:

Photo-Realistic Shader Effects – Coordinated, researched, and built an advanced, physically accurate realtime lighting model using 'Light Propagation Volumes', and a 3d graphics engine in C++ to prove the theory.

## SKILLS OVERVIEW

Mobile UXD Web Programming & Design JS, Java, Python, C++, PHP, SQL VCS: Git, Stash, CVS Leadership Adobe Creative Suite Certified SolidWorks Associate 3d Animation Software Proficient Japanese

2011-2015