# Marc Auger

Hardware & Software Engineer

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I'm a full stack mechatronics and software engineer, with experience developing mechanical and robotic systems, control electronics, firmware, and user interface software. I specialize in proofs-of-concept and getting prototypes running as quickly and cheaply as possible, but I also enjoy the second ninety percent of a project. I'm successful because I'm good at teaching myself and architecting complicated systems.

### EXPERIENCE

#### LEAD ENGINEER, STEALTH-MODE METAL ADDITIVE MANUFACTURING STARTUP Oct. 2014 - Present

- Developed mechanical prototypes, including design and fabrication of precision robotic and optical systems.
- Developed firmware and machine interface software in C, Python, and JavaScript.
- Developed custom electronics: circuit design and PCB design, fabrication, assembly, and testing.

### DEVELOPER, SPACE TRADER iOS

- Recreated a classic 1980s (outer space merchant) role playing game for iPhone in Swift.
- Built massive, logic-intensive codebase from scratch, with reference to legacy codebases in C++ for Palm pilot and in Java for desktop.
- Updated the UI in a manner both completely faithful to the original experience and completely at home on the iPhone.
- Maintained and improved the app over six updates and counting, responding to bug reports and customer feedback.

## Co-Founder & CEO, Isis3D

- Led the engineering and design of the Isis One, the first prosumer 3D printer to directly compete with enterprise-level machines, featuring soluble support and dynamic bed leveling.
- Built and tested prototype and production units; Oversaw both in house and outsourced manufacturing processes to technical and quality specifications.
- Directed the development of the Isis One's precision-aligned dual extruder printhead, an unprecedented design that quadrupled reliability and achieved a 50% improvement in print speed.
- Spoke and demonstrated the printer at several demonstrations around the Chicago area and at MIT.
- Wrote marketing copy for the company's website.

### EDUCATION THE UNIVERSITY OF CHICAGO

Bachelor of Arts with General Honors in Music GPA: 3.5/4; Deans List every quarter Chicago, IL Sept. 2009 - Aug. 2011

### BARD COLLEGE

Music and Science Curriculum GPA: 3.89/4 Annandale-on-Hudson, NY Aug. 2006 - Dec. 2008

#### SKILLS & LANGUAGES

- Languages: Swift, JavaScript, C, Python
- Other technologies: Arduino & RasPi, Angular, Node, Express, MongoDB, image manipulation libraries, Git, Linux.
- Software: Onshape, SolidWorks, Upverter (electronics CAD package), Adobe Illustrator

#### June 2016 - Present

#### January 2012 – October 2014