

## A Strong Educational Background

**Iowa State University** – Graduating **May, 2015**  
Software Engineering - GPA: 3.12/4.0  
**Pella High School** 2007-2011

**Went to Valencia, Spain** summer 2012 to study abroad with ISU  
**Studied Spanish in Madrid, Spain** for 6 weeks, summer '10-'11

## I Turn Passion into Experience

*I am passionate about:*

### **Enhancing my Technical Skills**

#### **MATLAB Graphics Engineering Intern** '13

- Worked at the MathWorks headquarters in Natick, MA for one semester
- Designed test suites to analyze customer and internal code primarily with graphics
- Provided usability and functional recommendations for MATLAB updates

#### **Union Pacific Systems Engr. Intern** '13

- Developed system to remotely monitor the status of RFID locks on shipping containers
- Wrote FTP and HTTP Server in Python to handle data visualization and storage

#### **Oak Ridge National Laboratory Intern** '12

- Designed image processing GUI's to characterize soot particle images
- Developed full suite of tools to improve usability inside the MATLAB environment

#### **Toying with Technology TA** '13

- Class for Education majors on how to teach engineering to kids in an exciting way
- Designed and graded course projects

#### **MATLAB Curriculum Development** '12

- Set up data acquisition sensors and designed content for class integration

#### **MATLAB Tutor and Grader** '12

- Tutored introductory MATLAB and problem-solving class 10 hours/week
- Led review sessions, proctored exams, and graded homework for MATLAB class

#### **Under-Graduate Research** '12

- Designed MATLAB GUI to assist with analysis of photo-voltaic cells for efficiency
- Won technical presentation skills award

### **Being Involved in my Community**

#### **Iowa FIRST LEGO League Chair**

- Added innovation to the university's largest engineering outreach event of the year
- Coordinated 12 regional events across Iowa impacting nearly 4,000 kids across the state
- Led 15 member planning team and oversaw all operations of the event

#### **Engineering Student Council VP of Outreach**

- Plan college-wide outreach event, 200+ kids
- Carry out various student council duties

#### **Engineer's Week Publicity Co-chair** '12

- Led sub-committee meetings planning for promoting college's largest event of the year
- Designed, chose, and ordered promotional materials such as fliers, sharpies, and t-shirts
- Worked extensively with on-campus tools to raise awareness in a very cost effective way

#### **Spring Career Fair – Advertising Chair** '12

- Did all advertising and publicity for one of the largest indoor career fairs in the nation
- Designed nearly all promotional materials for the fair and maintained social media

#### **American Society of Mechanical Engineers**

- Organized over 15 speakers, outreach events, and social activities for the club
- Planned two ASME conference trips entirely

#### **Engineering Outreach for K-12 Students** '12

- Represented Iowa State at several conferences, legislative days, corporate presentations, and local outreach events
- Participate in Minds of Tomorrow, an engineering outreach group on campus

#### **Freshman Honors Program** '11

- Nominated for "Outstanding Member" scholarship

### **Entrepreneurship and Marketing**

#### **Collegiate Competition Success** '12

- Won "Best Overall" and "Audience Choice" in the ISU Business Pitch competition for a LEGO mosaic pitch
- Placed in top 5 in the ISU Business Plan competition for same mosaic idea

#### **Started the ISU Ticket Trader, a place for ISU students to buy and sell tickets online**

- Close to 5,000 students participating
- At times, 400+ tickets are traded per week

#### **Freelance Programmer and Consultant**

- Find my own work and work mostly in the realm of image processing and GUI's
- Over \$3,500 in profit from clients around the world since starting in March '13

#### **MathWorks Student Ambassador** '13

- Lead product demos, organize contests, and promote student and faculty use of MathWorks products within the college

#### **Okoboji Entrepreneurial Institute** '13

- 1 of 8 selected to represent ISU at Institute
- Gained first-hand knowledge of business concepts and business pitch experience

#### **Brand Ambassador (various brands)** '13

- Weekly product demos at Costco and Target, closed sales on a regular basis

#### **Started Brick-Builders, an online store that sold new Lego bricks and sets globally**

- Started October 2010 with \$100 investment, over \$30,000 in sales in first year and a half
- Did business in over 30 countries and on six continents, did the shipping myself

#### **Started Creatively Cute, sold custom hand-made jewelry out of Lego pieces**

- Sold online, at craft shows around Iowa
- Over \$2,000 in sales first summer

## Rapidly Increasing Technical Skills

### **MATLAB (Expert User)**

- Image Processing
- GUI design and back-end coding
- Structures/Object-Oriented Programming
- Data Acquisition
- Data Visualization

### **Programming**

- Java (Intermediate)
- Python (Intermediate)
- HTML/CSS (Intermediate)
- Familiar with VBA (Beginner)
- Teaching basics of programming

### **General**

- Business Spanish
- QuickBooks
- Microsoft Office (very advanced)
- Community Outreach
- STEM Education Legislation