

## EDUCATION

Oakland University, Rochester, MI

Fall 2012 - Fall 2015

Bachelor of Science in **Computer Engineering**  
Bachelor of Science in **Electrical Engineering**  
Graduate of the **Honors College (Cum Laude)**

**GPA: 3.56**

**Bilingual**, fluent in both **English** and **Arabic**

## Awards and Scholarships

- |  |             |
|--|-------------|
| - Tau Beta Pi Sophomore Recognition Award (Given to top 20 of Sophomore class) ( <a href="#">Link</a> - See Page 5)  | 2013        |
| - Google Glass Business Plan and Development Competition (1st Place): Developed business plan and prototype for a musical educational app with ideal experience on Google Glass. ( <a href="#">Link1</a> ) ( <a href="#">Link2</a> ) ( <a href="#">Link3</a> ) | 2014        |
| - Code Michigan, Detroit (Top 3): Developed a Michigan themed Trivia game over a weekend ( <a href="#">Link</a> )  | 2014        |
| - MI Competitive Scholarship & OU Academic Achievement   | 2012 - 2015 |

## Skills

SW Languages:	Coffeescript, Node JS, Javascript, HTML, CSS, JAVA, C#, C++, Ruby, Assembly, Verilog, VHDL, Swift
HW Programming:	Freescale (Motorola) HCS12, Arduino, Particle, Siemens PLC, Tridium JACE modules, Rockwell PLCs
Dev OS:	macOS, Linux, Windows, Android
Frameworks & Platforms:	EmberJS, AngularJS, MongoDB, Redis, Docker, AWS, GCP, Niagara AX Framework, d3.js

## EXPERIENCE

Full Stack Software Developer

eFlex Systems

2014 - Present

- Full-Stack developer on a small team working in an agile environment
- Developed a proprietary, real-time, production critical software that is being used on the plant floor
- Professional TDD across the board (unit, integration and acceptance tests) for front and back end
- Worked closely with team designer and QA testers to deliver value in reasonable time
- Lead research development with wearable devices (Google Glass)
- Took on mentoring and management responsibilities as needed
- Developed multiple dashboards and reporting pages with c3js, d3js
- Automated Docker containerization and deployment with Ansible playbooks
- Implemented server-side scripting in NodeJs, C# (mono) and some Ruby
- Code Reviews and CI on TeamCity, test coverage 100% for backend and >70% for front-end JS
- Written multiple shell scripts and Makefiles, as well as, experienced on Linux CLI

Lead Software Developer

(Startup in stealth mode)

Sep 2015 - Dec 2016

- Developed a web app application leveraging web speech audio and Google Speech API
- Agile development process and automated using web audio tools
- Programmatically integrated web streaming capabilities by using YouTube APIs and Wowza streaming server
- Developed front end on emberJS and backend using NodeJS and Koa
- Developed a real-time dashboard using Websockets that gets updated with data from a mongoDB

Software Engineer, Intern

PA Solutions

2012 - 2014

- Designed automotive electrical connections on AutoCAD
- Developed internal integration tools between Microsoft Office and AutoCAD using VBA, and following TDD process
- Programmed Siemens and Rockwell PLCs for Mercedes-Benz plant in Alabama
- Worked closely with KUKA Robots programmers to build them automation tools and increase their efficiency
- Collected and evaluated customer requirements to build business logic

## Projects and Notable Achievements

Founder, President

Makers at OU

2014 - 2015

- First Chapter founder at Oakland University
- Aligned the org to be on the path of inspiring and leading OU students into realize the creative and entrepreneurial potential
- Recruited students by presenting the org's statement, purpose, and resources during classes and by working with Faculty
- Developed and presented workshops about Internet of Things, Web Development, and Virtual Reality
- Reached out to and hosted speakers from local companies in the Rochester area as well as Startups from Detroit
- Worked with faculty to volunteer our time and help FIRST robotics teams from local middle and elementary schools

Solar Panels Efficiency Research

Senior Capstone Project

Fall 2015

An interdisciplinary project with the director of Clean Energy Research Initiative at OU to setup and test different types and configurations of Solar panels on the roof of OU's new Engineering Center

- Lead the software development of this project
- Planned, and executed the software installation on JACE modules by Iridium
- Worked in tandem with fellow mechanical and electrical engineering students to deliver the project on time
- Delivered professional verbal and written reports to stakeholders twice a week throughout the semester
- Wrote and delivered milestone presentations at half-point and the end of the project to stakeholders

Predictive Analytics in Sports (Soccer)

Honors College Thesis

2015

Conducted a research over the span of 6 months to investigate and develop non-invasive methods of predictive analytics in sports, particularly, Soccer. The purpose of the research is to help coaches make data-informed decisions in real-time

- Worked closely with a Faculty mentor from the Computer Science department over the span of the research
- Purchased and tested different wearable devices, including products from Adidas, Fitbit, and LG.
- Analyzed Data collected by existing research papers, as well as, from my own data collection on the field
- Presented my findings to an audience of 60 students and faculty at the Honors College

## Published work

- Ember-cli-pdf-object: Ember plugin for adding PDFs effortlessly (npm) ([Link](#)) 2016
- Translations-Sheet CLI: Simply update your translations sheet on GDrive sheets from the command line. ([Link](#)) 2016
- Android App: Simple, yet fully functional, Android app for generating and printing receipts on the go. Built for a bread distributing company trucks' drivers. ([Link](#)) 2016
- Riem: A Chrome Extension designed to help you find your tab when you have too many open ([Link](#)) 2015