John O'Sullivan

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(847) 345 7023
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OBJECTIVE

I strive to use my creativity and diverse technical skills to resolve complex development challenges while always seeking for new, more effective technologies to integrate and improve on existing projects.

EDUCATION

Loyola University Chicago– Chicago, IL — M.S. Computer Science
GPA 4.00 — Graduation Expected May 2018
Loyola University Chicago– Chicago, IL — B.S. Computer Science
GPA: 3.58 — Graduated Cum Laude May 2017

Relevant Course Work:

- HCI – Human Computer Interaction
- Intermed Obj-Orient Developing
- Algorithms
- Web Services
- Data Warehouse & Mining
- Machine Learning
- Programming Languages
- Markup Languages
- Information Systems
- Cryptography
- Data Structures
- Client-Side Dev

ACTIVITIES AND AWARDS

Top 5 Placement in World Virtual GovHack – Sponsored by the United Arab Emerates and AngelHack
Submission: Project SafeHarbor *December 2017*
https://projectsafeharbor.com/

- Part of a three-person team that designed and developed an open-source platform which enables communities to provide basic resources, safety, and security to asylum seekers around the world.
- Includes technologies like biometrics and blockchain to help locate missing family members in various refugee camps and immediately link incoming refugees to health, educational, and job opportunities.

Unchain the Frame Hackathon 1st Place Winner – Sponsored by IBM and AngelHack
Submission: SpotExchange *November 2017*
https://thespot.exchange/

- Part of a three-person team that designed and developed a blockchain-based, artificial intelligence-powered parking reservation marketplace.
- Connects buyers and sellers of physical parking spaces using an autonomous and decentralized system which determines optimal pricing using a self-learning ecosystem in real-time.

Fall 2017 Project Presentation Winner – Sponsored by Loyola University Chicago CS Department
Submission: MiHome *December 2017*

- Part of a two-person team that designed and developed an open-source environmental sensor which provides studens and researchers a cheap and reliable data collection platform.
- Included both the hardware development using Particle IoT and Arduino's as well as the software development of a Cordova application to interact with the hardware for sensor and user data via a web API.

SKILLS

Known Languages: JavaScript, Java, C#, Python, C, C++, and Scala
Xamarin Studio: Well-rounded understanding of Xamarin technologies
Node.js: Build and deploy a full-stack project run on Node.js
.NET: Ability to manage and update source in a .NET project
Version Control: Expert with git version control from commits to resolving merge conflicts
SQL/MongoDB: Formulate queries in SQL as well as in NoSQL
UI/UX: Build and run unit tests and UI tests
Refactoring: Ability to refactor and improve existing source to meet new client-side requirements
Apache: Understanding in REST Services and able to build a web service in Java (CXF, Tomcat)
MS Office: Proficient in all aspects of Mircosoft Excel, Word, PowerPoint, and Access
Framework/Libraries:

JAVA **Javascript** **C#**

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- JUnit 4
- MongoDB Driver/BSON
- Apache Commons
- Jackson JSON parser
- Full-Stack
- Ionic
- Moment.js
- Bootstrap
- jQuery
- Lodash
- Common .NET libraries
- ReactJS .NET
- Pusher .NET
- PubNub PCL

WORK AND VOLUNTEER EXPERIENCE

O'Tech Software, LLC (formerly Techman Software, LLC) – Chicago, IL
Founder *August 2012-Present*
http://otechsoftware.com/

- Explore new and efficient designs for mobile consumer applications and smart technologies.
- Manage and develop ongoing full-stack projects which integrate cross-platform technologies

Loyola University Chicago – Chicago, IL
Teaching Assistant *August 2017-Present*

- Grade homework, projects, and exams.
- Assist students with questions or difficulties regarding class material during office hours.
- Periodically give lectures in "Introduction to Object-Oriented Programming", "Data Structures.", "Programming Languages", "Intro to Computer Systems", and "Human-Computer Interaction".

National Association of Realtors CRT Laboratory – Chicago, IL
Software Development Intern *June 2017–September 2017*

- Refactored an application for realtors to track smart devices in a house currently on the market.
- Designed and developed an end-user Preact application for the Rosetta Home, an open source environmental sensor kit for commercial and residential real estate.

Argonne National Laboratory – Argonne, IL
Researcher/Developer *August 2015-August 2016*
Science Undergraduate Laboratory Internship (SULI) *May 2015-August 2015*

- Worked on the Portable, Extensible Toolkit for Scientific Computation (PETSc), a scientific library for running high-level computing experiments in physics, chemistry, and engineering.
- Improved upon the Scientific Application Web **s**erver (SAWs) which allows PETSc to be interfaced through the web browser by taking the existing C library with the integrated C Web Server (mongoose.c) and modifying it to enable Websocket communication, allowing a Javascript web app to interact with PETSc experiments in real-time.

Loyola University Chicago – Chicago, IL
Mobile App Developer *July 2014-August 2014*

- Developed the Xamarin.Android mobile application "Here For You" for the Student Wellness Center which provides information on how to go about reporting sexual assault or domestic violence to school or outside authorities.
- Features of the application include signs that a friend may be in an abusive situation or have been assaulted, the procedures done in a rape kit, and nearby hospitals for counseling services.

FIRST Robotics – Chicago, IL
Volunteer *August 2015-December 2015*

- Assisted students in building Lego robots for the Lego Mindstorm Challenge.
- Taught students ranging from 1-8 grades block coding from the Lego Mindstorm kit.