

John O'Sullivan

40 E Oak St, #1511 Chicago, IL 60611

(847) 345 7023

josullivan1@luc.edu

johnosullivan.github.io

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

GPA 4.00

M.S. Computer Science

Graduation Expected May 2018

Loyola University Chicago– Chicago, IL

GPA: 3.58

B.S. Computer Science

Graduated Cum Laude May 2017

Relevant Course Work:

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

ACTIVITIES AND AWARDS

Top 5 Placement in World Virtual GovHack – Sponsored by the United Arab Emirates 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 students 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 Microsoft Excel, Word, PowerPoint, and Access

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Framework/Libraries:

JAVA

- JUnit 4
- MongoDB Driver/BSON
- Apache Commons
- Jackson JSON parser

Javascript

- Full-Stack
- Ionic
- Moment.js
- Bootstrap
- jQuery
- Lodash

C#

- 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 server (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.