

Maks Drzezdzon

Blanchardstown Dublin | 087 396 7327 | maksdrzezdzon@gmail.com
maksthorn.github.io | linkedin.com/in/Maksymilian-Drzezdzon | github.com/Maksthorn

PROFESSIONAL SUMMARY

I'm a full stack software engineer, recent graduate and a python/IOS hobbyist. I'm planning on doing a masters as soon as possible in software architecture, big data and AI. I'm interested in pursuing full stack/data-oriented roles where I can grow professionally. Recreationally I work on projects to supplement my learning, read a lot, practice Polish and German as well as Rubik's cube algorithms when time allows for it.

EDUCATION

Bachelor of Science in Software and Network Engineering **08/2015 - 10/2019**
Technological University Dublin - City campus (2:1)

QQI Level 5 in Programming Fundamentals in C# **06/2013 - 09/2013**
CCT College Dublin – while in secondary school (4th year summer)

SKILLS

Programming: Java, Python, Swift, C++/#, JavaScript, TypeScript, PHP

Cloud and Databases: MySQL, MongoDB, PostgreSQL, SQLAlchemy, Node, Realm, Digital Ocean, Firebase

Other Technologies: Git, Junit4, XML, JSON, Flask, Android, TensorFlow, Keras, Angular, React

Languages: English (Fluent), Polish (Advanced), German (Basic)

WORK EXPERIENCE

General Motors -- Full Stack Software Engineer **08/2019 - 11/2019**

- Architected spring micro-services used to relay product information, utilized and learned company API
- Initiated migration of simple corporate pages to Angular 2+, reported progress with daily stand ups

Virgin Media -- Network Engineer Intern **06/2017 - 12/2017**

- Collaborated to overhaul software used to generate configurations for switches and troubleshooting circuit paths
- Authorized with access to the network spanning over of the country, updated documentation
- Communicated issues to senior engineers if any action was required such as replacement of equipment

PERSONAL AND UNIVERSITY PROJECTS

Online Book Retailer (Java, Spring, Angular, Swing, HTML5, CSS3, Bootstrap4, XML, PostgreSQL, MVC)

- Developed a Rest Spring boot backend with 4 microservices on Digital Ocean, tested with Postman
- Designed a simple and clean angular front-end to present data, integrated external API for dummy data
- Revamped as Desktop self-check-out alternative following UI/UX best practices, after mediating and negotiating with professor and 2 other students to facilitate moving forward with project mix up

SoundCloud Clone (PHP, HTML5, CSS3, Digital Ocean, MariaDB, Singleton pattern)

- Deployed and remotely configured a cloud server, setting up HTTPS, Apache2, Nginx, SSH and ports
- Planed a database schema with MySQL workbench, implemented with MariaDB via Linux terminal
- Developed a small web application resembling sound cloud allowing users to have profiles, playlists, update/delete/create playlists with new songs, view profiles and make favorite songs lists
- Implemented intrusion prevention against cross site scripting, SQL injection, SQL sanitization and parameterized queries with a connection manager class to reduce code overhead.

IOT Home Cloud Server (C++, Node, JavaScript, HTML5, CSS3, MQTT protocol, Raspberry pi, Bootstrap4)

- Customized Bluetooth low energy services collecting microcontroller data, relaying it to a pi server
- Presented data communication through a simple frontend developed with HTML5, CSS and bootstrap
- Integrated trigger messages that would start services and a button service alerting a door being opened

Python Data Analysis (Python, TensorFlow, Kaggle, Google Dataset Search, Pandas, BeautifulSoup, Pickle)

- Crafted a command line tool to read zipped and compressed files from cloud servers
- Analyzed mobile dataset for user count, user count for screen size averages, money spent on apps, time spent and correlation between them to find insights in user engagement with mobile gaming products
- Created 2 classification models with TensorFlow, one predicting student grades and Alzheimer patient brain scans at different stages, each dataset containing separate train and test data, both ~98.9% accurate
- Analyzed different datasets from wowlogs, Kaggle, Google Dataset Search to further learn data analysis techniques such as web scraping with BeautifulSoup, data cleaning with pandas, pickling AI models

Lectured Python in Ardgillan-CC Secondary School (Python, PyGame, Spyder)

- Arranged a weekly lesson in preparation for 3-month coding cert while studying fulltime
- Collaborated with colleague and guided 30 students for 7 months, teaching basic concepts with PyGame

IOS Development (Swift, SwiftUI, APIs, SwiftyJson, Alamofire Firebase, Python, Cocoapod, Core data)

- Integrated weather forecast API to create an app with adaptive UI vectors as background images
- Tailored 3 apps with SwiftUI such as HackerNews, To-Do and others with over 300 commits on GitHub
- Implemented 2 design patterns such as MVC, Observer and currently learning MVVM among others
- Trained several models, converted and utilized 3 pretrained AI models for image recognition app
- Composed a camera dictionary app for my grandparents, currently it's sufficient to help with shopping

Server Log/Data Analysis Tool (Python, Pandas, PyQt5, Apache HTTP Server, python IPWHOIS)

- Learned Python, Pandas and PyQt5 to prototype a desktop application to parse apache logs
- Utilized Python data structures and a to extract relevant information from a sample of 2000 connections
- Drafted a report to present insights from data, such as ~50% traffic coming from Chinese offices
- Achieved by calculating connections per second from a set of Ip isolated using D&C methodology
- Presented visualization to mediate information to Cyber-sec professor from lab honey-pot logs

Arduino Bluetooth Car Bot (ASM, C++, Java)

- Delivered a project on a tight work schedule (3 weeks) due to 8-week snow storm delaying parts
- Persuaded professor to start on the project and guided team members with resources to learn
- Co-ordinated a project from beginning to end, spearheaded project to completion after 3 members left
- Demonstrated knowledge of Bluetooth (BLE), Android, Debugging, embedded system programming