## Derek Otcasek

19 Denny Street, Apt. 3 Dorchester MA, 02125 Phone: 781.690.7793 Email: dotcasek@gmail.com Website: dotcasek.github.io/pf GitHub: github.com/dotcasek LinkedIn: linkedin.com/in/dotcasek

#### **Education**

University of Massachusetts Boston Bachelor of Science, Computer Science, December 2019 | GPA 3.125 / 4.0

Bunker Hill Community College Associate of Science, Computer Science, 2017 | GPA 3.98 / 4.0 – Dean's List

Bunker Hill Community College Certificate, Object Oriented Programming and Design, 2017

### **Technical Skills**

Programming Languages: Java, C++, JavaScript, Python, C, C#.

**Development Tools:** OpenCV, Three.js, WebGL, Git, AngularJS, Matplotlib, GDAL, Npm, Composer, Gulp,

HTML, CSS, MySQL, OracleDB, PHP, AWS, CLI, LAMP, Anaconda, Android Studio.

Coursework: Data Structures & Algorithms, Computer Graphics, Computer Vision, Operating Systems,

Database Management, Android Development, Compilers, Object Oriented Programming, Linear Algebra, Probability and Statistics, Discrete Mathematics, Theory of Computation.

Operating Systems: UNIX, Linux, Ubuntu, CentOS, Windows, MacOS.

### **Projects**

#### Image Processing for Image Segmentation Model - Python - 2019

- Analyzed image training set data using OpenCV and generated statistical metadata.
- Created data visualizations for analysis using Matplotlib and NumPy.
- Preformed post-processing on images using morphological transformations and thresholding based on metadata.
- Used the open source library GDAL to extract geospatial data info on images.

#### UMBrella Search - JavaScript - 2019

- Deployed Amazon Web Server and developed accompanying software which enables patrons to share library records via Text Message.
- Developed custom components to enhance library search functionality and accessibility using AngularJS.
- Enhanced user experience via UI customizations and integration with third party APIs.

#### Ezproxy Log Parsing Tool - Java - 2019

- Created Java tool to parse 5 years of Ezproxy log files with over 50 GB of data consisting of over 150 million lines.
- Enhanced security using MD5 encryption to anonymize patron data.

## Relevant Work Experience

#### University of Massachusetts, Boston, MA | Software Developer | January 2019-December 2019

- Developed Web applications for Library Systems and Discovery Services team.
- · Analyzed library website usage data by parsing log files and preparing data visualizations in Tableau.
- · Created written documentation and tested new features in sandbox and production environments.
- Managed administration of AWS EC2 server and Alma-Illiad sync server.

# Other Work Experience

#### Tatte Bakery, Boston, MA | Barista | January 2019-Present

- Prepare coffee and provide customer service with high volume of guests.
- Communicate clearly with colleagues and guests.
- Stay calm under pressure and manage time accordingly.