#### **Aleksandr Mandzyuk**

aleksandr.mandzyuk@wsu.edu | (425) 343-8156 | linkedin.com/in/alex-mandzyuk | github.com/alexman258

#### Education

#### Washington State University Everett

August 2017 - December 2019

- Bachelor of Science in Software Engineering 3.51
- Major Coursework: Software Engineering Principles, Operating Systems, Parallel Computing, Database Systems,
  Distributed Systems, Software Design and Architecture, Big Data, Computer Security, Software Requirements and Maintenance

#### **Everett Community College**

September 2015 - June 2017

• Associate of Arts and Science (Direct Transfer Agreement)

# **Skills**

# Programming Languages

• Java, Python, C#, C/C++, SQL

#### <u>Technologies/ Methodologies</u>

• Git, Linux, Junit, Google Guice, Keras, AWS, Agile / Scrum

#### General

• Fluent in English, Ukrainian, and Russian

# **Experience**

#### Software Engineer Intern

May 2019 - August 2019

Amazon Web Services, Seattle, WA

12 week internship for the CloudWatch Application Insights team.

- Went through end-to-end software engineering process. Starting with design reviews and ending with a feature ready for production (pending security review)
- Implemented (currently unreleased) backend feature in Java. Worked with YAML/JSON CloudFormation stacks to update configuration of application
- Created set of CRUD API's to interact with said feature.
- Experience using AWS (EC2, DynamoDB, CloudFormation, SMS, CloudWatch)
- Unit and Integration Testing

# **Projects**

Bullet Hell Game February 2019 – April 2019

A basic bullet hell game built as a PC application using Java and the LibGDX game development framework.

- Implemented the Entity-Component-System architectural pattern.
- Made use of a combination of software design patterns to build an application that is easily extendable.

## Feedback Collection and Analysis System

September 2018 – April 2019

A general purpose feedback analysis tool to help developers fix bugs. My responsibility in this project was the machine learning portion.

- Created a simple text classification machine learning model using the Python Keras library.
- Implemented sentiment analysis model.
- Using Python Flask framework, created a simple server to host both ML models.

# SQL Database Query Application

March 2018 - May 2018

A "Yelp-like" application that allows users to read and write reviews, view data about businesses, and create their own personal profile to view their own comments, tips, friends, and other metrics for their account.

- Built using C#, PostgreSQL, and Python. Used Python to parse JSON files and populate PostgreSQL database.
- GUI built in C# WPF application. This application queries the SQL database in order to retrieve relevant information and populates the WPF window with all retrieved information.
- Implemented Bing Maps API for visual representation of business location.

<u>Spreadsheet</u> February 2018 - March 2018

A simple spreadsheet application that can do basic operations on cells and read from/ save to file.

- Produced using C#, and created a C# WinForms application for GUI. Implemented a parse tree for math operations, and observer pattern to update cells.
- Saving and loading done by converting spreadsheet to XML.