# JONATHAN MACK

# 3B Software Engineering

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#### **SKILLS**

PROGRAMMING LANGUAGES: Python, Java, JScript, VBScript, PowerShell, HTML, CSS, JavaScript

FRAMEWORKS: React JS, Bootstrap, Express, TkInter

IDEs + TEXT EDITORS: Visual Studio Code, Android Studio, PyCharm, NetBeans, Atom

SOFTWARE AND TOOLS: Unified Functional Testing, TestComplete, Jira, Artifactory, Confluence, SharePoint, Firebase, Postman

#### **PERSONAL PROJECTS**

A\* Search Visualizer June 2020

- A Python Tkinter application that visualizes the A\* search algorithm
- Features an easy-to-use NxN maze editor (2x2 to 100x100), the ability to import / export custom mazes, and solver metrics

**Firebase Store** Sept. 2019

- A mock e-commerce store for Android devices built with Android Studio (Java) and Firebase
- Features account creation, user authentication, email validation, inventory management, and image galleries

## **WORK EXPERIENCE**

Test Developer, Co-op May 2020 - Dec. 2020

Kinaxis, Ottawa, ON

- Investigated, reported, and resolved regression test failures using an automated functional testing tool, Unified Functional Testing, and VBScript to ensure that delivered software surpassed quality standards
- Implemented PowerShell scripts to automate the deployment of continuously integrated builds onto virtual machines for internal testing and development

PV Software Developer, Co-op Jan. 2020 - Apr. 2020

Ross Video Limited, Ottawa, ON

- Spearheaded the design and implementation of a test automation framework using JScript in the functional automated testing platform, TestComplete, for a real-time graphics system to alleviate the burden of manual regression tests
- Integrated the test automation framework with existing software by writing Python and batch scripts to report and archive test results

**Functional Analyst, Co-op** May 2019 - Aug. 2019

Canada Revenue Agency, Ottawa, ON

- Devised and presented a project proposal for the configuration of SAP Human Capital Management salary tables to the clients' senior management (Canada Border Services Agency and Canada Revenue Agency)
- Configured SAP Human Capital Management salary tables to accurately reflect current pay rates affecting 40,000+ CRA and CBSA employees
- Developed an internal training wiki page using Confluence to accelerate the learning process of new HR Pay employees

## **Software Quality Assurance Intern**

Dec. 2018 - Apr. 2019

Agriculture and Agri-Food Canada, Ottawa, ON

- Tested the conversion from paper to digital records for 300+ employees by comparing screen captures of the EIMSS system (electronic forms that store employee records and resource allocation) with a senior tester for UI and data consistency
- Demonstrated analytical abilities by identifying areas needing improvement and providing key recommendations to enhance application functionality

# **SCHOOL PROJECTS**

#### **Communication for Engineers Term Project**

Sept. 2018 - Dec. 2018

Researched the viability of drones in search and rescue missions and pitched a funding proposal that highlighted societal benefits to a panel of three experienced judges

# **EDUCATION**

# Software Engineering, Bachelor of Engineering, Co-op

Sept. 2017 - May 2022 (Expected)

Carleton University, Ottawa, ON

Carleton University - A. D. Dunton Scholarship (1A, 1B, 2A, 2B, 3A)

Sept. 2018 - Present

# **REFERENCES**

Available upon request.