# **GILLIAN PIERCE**

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#### **EDUCATION**

MSc. Computer Science, University of Southern California, Los Angeles, CA

2020 - Present

BSc. Computer Engineering Co-op 2020 With Distinction, University of Alberta, Edmonton, AB

2015 - 2020

Graduating GPA: 3.9/4.0

#### **TECHNOLOGIES**

 Web Development: React, JavaScript, HTML5, CSS3, jQuery, Node, Foundation, Bootstrap

• Languages: Java, C/C++, Python, SQL, SQLite, Perl, Bash, Lisp, Prolog, C#

• Software/Others: Android Studio, Unity, Version Control (Git), Matlab, Arduino, Sketch

# Relative Experience JavaScript/Typescript: Lisp: •

#### **WORK EXPERIENCE**

#### SOFTWARE ENGINEER INTERN

May – August 2021

CosmosDB, Microsoft, Redmond, WA

- Developed new technical competencies in C++, Visual Studio, and Azure DevOps
- Collaborated across teams to design and implement a complete data ingestion solution for CosmosDB Gremlin API
- Demonstrated code functionality by writing thorough unit and integration tests
- Created a framework of modular, scalable software components to allow for future expansion of data transfer tooling to other CosmosDB API's

#### RESEARCH ASSISTANT

May - August 2017, June – December 2020

Service Systems Research Group, University of Alberta, Edmonton, AB

- Acted as the principal developer for a 3D human anatomy learning game using Unity and C#
- Used Django framework to implement a variety of healthcare related applications
- Designed and implemented a JavaScript, jQuery and D3.js based visual SPARQL guery editor
- Wrote Python scripts to automate parsing and formatting of RDF data
- Co-authored a paper presented at EdMedia + Innovate Learning Conference 2021

#### SOFTWARE ENGINEER CO-OP

June – December 2019

Conversations Inbox, Hubspot, Boston, MA

- Leveraged React to create responsive, intuitive, and visually appealing user interfaces
- Wrote comprehensive unit and acceptance tests using Jasmine and Selenium respectively
- Used GitHub Enterprise version control system and code review tools to ensure high quality code was shipped to customers
- Autonomously integrated and deployed code to production using sophisticated in-house web tools
- Participated in bi-weekly meetings regarding reliability, alerting and technical debt

#### SOFTWARE DEVELOPER CO-OP

May – September 2018

Network Automation, Shaw Communications, Calgary, AB

- Developed Java code to expand the functionality of a network device configuration management tool
- Refactored an existing web application written in Java, JavaScript and JSP to use the MVC architectural pattern
- Utilized Tableau to develop data visualizations as part of a proof of concept
- Employed Atlassian's Crucible tool to complete thorough code reviews

### **TECHNICAL SUPPORT ENGINEER TIER 4**

January – May 2018

IP and Optical Networks, Nokia, Kanata, ON

- Wrote Perl scripts to interface with the Jira REST API and display meaningful data summaries in HTML tables
- Configured virtual network topologies to aid in the construction of a simulated customer network
- Created a Bash script to make scheduled backups of virtual machines and prune outdated backup files
- Designed a system to automate the creation of draft release notes documentation

#### PERSONAL PROJECTS

#### UFEST VOLUNTEER WEBSITE | https://www.volunteer.ufest.ca

- Website created to coordinate volunteering at Edmonton's premier Ukrainian Festival
- Tech Stack: Typescript, React, Django, Pythonanywhere

#### **CLOUDGARDEN** | https://github.com/Green-Party/CloudGarden

- A self-contained smart gardening system that is controlled by and provides real-time sensor data to a progressive web application
- Tech Stack: Typescript, React, Material UI, Node and Express, Raspberry Pi and Arduino, Azure and Auth0

# **BOTSPOTR** | https://github.com/LukeSlev/BotSpotr

- A viral tweet analyzing web application that consumes Twitter urls and returns the likelihood that the tweet was retweeted by bots or humans
- Tech Stack: React, Node and Express, Twitter API, Botometer API

#### **COLLABIFY** | https://github.com/tymoorej/Collabify

- An Android application for creating collaborative playlists on Spotify
- Tech Stack: Android (Java), Firebase, Spotify API

#### **VOLUNTEER EXPERIENCE**

#### VICE PRESIDENT STUDENT LIFE

April 2017 – April 2018

Engineering Students' Society, Edmonton, AB

• Lead a team of event coordinators to plan and execute engaging and inclusive events for all engineering students at the University of Alberta

#### **EDUCATIONAL ACHEIVEMENTS**

- Chancellor's Excellence Citation (2015)
- Dean's Entrance Citation in Engineering (2015)
- University of Alberta Academic Excellence Award (2015)
- Faculty of Engineering Academic Excellence Award (2015)
- APEGA Education Foundation Academic Excellence Award in Engineering (2015)

# **REFERENCES**

• available upon request