# Michaela Foo

#### CONTACT DETAILS

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#### **EDUCATION**

B.Sc of Computing Science Simon Fraser University 2020.09 - Present

#### **TECHNICAL SKILLS**

- JavaScript, HTML, Python, C/C++, PHP, Bootstrap
- React.js, Node.js, Next.js, CSS
- · Docker, Git/GitHub, VS Code

#### TRANSFERABLE SKILLS

- Critical Thinking & Problem-solving
- Team Collaboration & Cross-Functional Teamwork
- Communication (verbal & written)
- Debugging & Troubleshooting
- Time & Task Management

#### **ACHIEVEMENTS**

# **Certification Of Al**

2021.03 - 2021.04 E-Learning Course, ICTC's Work-integrated Learning (WIL)

First Place Winner, BrightIdeas 2020.02 - 2020.04

SFU Enactus Entrepreneurship program

# **VOLUNTEER EXPERIENCES**

# **Barney's Furry Friends**

2023.09 - Present Dog Foster & Content Creator

# **SFU Volleyball Club**

2022.03 - 2023.09 Social Media Manager & Content Creator

#### **Code Initiative**

2022.01 - 2022.07 Tutor for app development using Python and Java

# TECHNICAL PROJECTS

#### TRAVEL COMPANION HUB

Java, CSS, React.js, React Query, GitHub, Bootstrap

- Designed and implemented a full-stack web application using React.js, CSS and Java, integrating APIs for real-time data retrieval
- Utilized browser developer tools, logging frameworks, and error tracking systems to diagnose root causes, improving frontendbackend data handling.
- Emphasized system scalability and maintainability, balancing user needs with technical constraints.

#### **CLASSIFICATION MACHINE LEARNING**

Python, Scikit-learn, NumPy

- Built and evaluated Perceptron, MIRA, and Naïve Bayes classifiers for handwritten digit classification tasks.
- Tuned training iterations and feature extraction strategies to improve validation accuracy and generalization on test data.

### **GRIDWORLD REINFORCEMENT LEARNING AGENTS**

Python, MDPs, Q-Learning, Value Iteration

- Developed agents using Value Iteration, Prioritized Sweeping, and Q-Learning, applying dynamic programming and temporaldifference methods to solve Markov Decision Processes (MDPs).
- Tuned exploration, learning, and reward parameters to influence policy behavior; validated performance through simulation, visualization, and autograder testing.

## **ANALYZE CANADIAN GROCERY PRICE TRENDS**

Python, SQL, Matplotlib, Linux

- Extracted and visualized data using SQL and Python to identify geographic and demographic pricing patterns.
- Optimized query performance and handled large datasets to ensure data integrity and maintainable workflows.

# TECHNICAL EXPERIENCE

# **AUDIO VISUAL TECHNICIAN**

2023.09 - Present

Simon Fraser University, Burnaby, BC

- Provided onsite multimedia support for classrooms and events across Windows and Mac systems, ensuring smooth AV operations.
- Assisted with hardware setup, troubleshooting, and documentation using SharePoint and Microsoft Teams.

## **SERVICE DESK TECHNICIAN**

2023.05 - Present

Simon Fraser University, Burnaby/Surrey, BC

- Diagnosed and resolved technical issues across multiple support channels; documented solutions in Confluence and TeamDynamix.
- Collaborated with IT teams to prioritize and resolve incidents involving hardware, network, and software systems.

## **QA ANALYST**

2020.06-2022.12

Conquer Experience, Surrey, BC

- Performed functional, regression, and exploratory testing to identify critical issues across development cycles.
- Created and executed detailed test plans while tracking bugs and progress through JIRA in Agile workflows.