

# Arrun Patkunasingam

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## EDUCATION

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### McMaster University

Sept. 2017 – Apr. 2022

Bachelor of Engineering - Software Engineering Co-Op

Hamilton, ON

- Courses: Data Structures & Algorithms, Software Practice & Experience, Databases, Operating Systems

## EXPERIENCE

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### Software QA Engineer

May 2020 – Dec. 2020

FGF Brands Inc.

Toronto, ON

- Developed a modularized Java based Selenium testing framework to improve code reusability for automated testing of future applications
- Implemented automated functional and performance testing using Selenium and JMeter reducing regression testing time by 80% resulting in faster releases to production
- Performed manual regression and black box testing resulting in a 90% increase in bug discoveries. Partnered with internal teams to analyze and resolve these defects while using the Azure DevOps environment to track changes.

### DevOps Engineer

Jan. 2020 – Apr. 2020

Royal Bank of Canada (RBC)

Toronto, ON

- Developed a program in JavaScript which leveraged Jira REST APIs to automate providing clients with solutions to their Jira tickets. Resulted in 40% more closed tickets per week.
- Provided support for tools used by the Operations/Testing teams and documented common solutions for these issues using Confluence which led to a 30% decrease in Jira tickets logged
- Worked on an agile release train to provide clients with scripts that helped automate redundant tasks for the tools they used

### Vision Team Developer

Sept. 2019 – Apr. 2020

McMaster Mars Rover Team

Hamilton, ON

- Worked with an interdisciplinary team to implement object detection using the YOLOv3 algorithm with Python OpenCV and Robot Operating System (ROS). Resulted in the rover retrieving items autonomously with a 97% success rate based on live vision input.

## PROJECTS

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### GroupGram | JavaScript, React, Node.js, Express.js, MongoDB

- Developing a full-stack web application which allows users to create groups with their friends, create albums for these groups and store pictures from the events they experience together
- Responsible for software architecture of both front-end and back-end of the website. Created and managing a team to collaboratively develop the application using the MERN stack.
- Built wireframe front-end using Figma and converted to React components for fast, scalable front-end development

### Bug Logger (bugreporterapp.herokuapp.com) | Python, Django, PostgreSQL, Heroku, AWS

- Developed a full-stack web application which teams can use to log bugs for their projects and update the bug's status as it's being handled
- Utilized Google Charts to give users an easy to understand visual of the statuses of their bugs within their projects
- Deployed using Heroku and AWS S3 for image hosting and scalability

### Dictionary Translator | Python, Tkinter, Google Translate API

- Used Tkinter and a dictionary set to make a dictionary application which can return a definition, provide spelling suggestions, or provide a translation to a definition using the Google Translate API

## TECHNICAL SKILLS

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**Languages** - Python, Java, JavaScript, HTML/CSS, C, C++, SQL

**Databases** - MongoDB, PostgreSQL

**Frameworks** - React, Node.js, Express.js, Django

**Developer Tools** - Git, Visual Studio Code, Eclipse, AWS, Azure DevOps Environment

**Libraries** - OpenCV, pandas, NumPy, Matplotlib, scikit-learn