Evan James Martin

CONTACT INFORMATION	*phone:* +1-604-816-6682 *email:* evan.martin@shaw.ca *website:* evmarts.github.io/blog ⤤	2966 West 36th Ave, Vancouver, BC, Canada

EDUCATION

B.Sc. Computer Science and Statistics, University of British Columbia, Vancouver campus. Expected graduation May 2019, 3.30 GPA. View my academic background here ⤤ .

SKILLS

Highly skilled and proficient in: Python, JavaScript, MATLAB, R Statistical Software
Proficient in: C, C++, Java, SQL, AppleScript
Frameworks/libraries/tools: OpenCV, Python Imaging Library (PIL), urllib, numpy, Beautiful Soup, JavaScript Promises, parse5, jQuery, RegEx, Git, Adobe Illustrator.

PROJECTS

Projects available at github.com/evmarts ⤤

Meme Recycler, see blog post ⤤

- Synopsis: Applied **OpenCV** and **Tesseract OCR** with **PIL** to break an Internet meme into a cropped image component and a string component. With the separated components, the program is then able to compose a recycled version of the inputted meme in a cleaner format than the original.
- Challenges: Needed to be able to dynamically crop an image to remove white borders, solved by using OpenCV to recognize the boundaries of the largest rectangular component in an image. Needed to be able to recognize images of text as strings of text, solved by integrating Tesseract's optical character recognition engine.
- Outcomes: Ability to take a collection of memes and recycle them into a cleaner format. Ability to analyze the textual and pictorial content of memes. Future considerations to add functionality to translate the language of a meme.

Social Media Account Growth and Marketing

- Synopsis: Grew six niche Instagram accounts via **web-scraping**, automated posting and **image generating techniques**. Became affiliated with businesses looking to advertise in my niches. Designed and sold niche-related t-shirts. Wrote a research paper on social media marketing from my experiences.
- Challenges: Spent a lot of time on finding content to post to my accounts, solved by automating content generation. Spent a lot of time searching for users to attract to my accounts, solved by scraping the usernames of users who interact with other popular accounts in my niche.
- Outcomes: Grew three accounts to **40k+ followers** each, three accounts to 20k+ each. Learned how to use Python to navigate and analyze large lists of Instagram usernames. Learned how to use Adobe Illustrator in the design of t-shirt graphics. Learned basics of Internet Marketing.

Query Engine

- Synopsis: Worked with partner to build the front and back end of an engine to query a server for data on past courses offered at UBC. Made asynchronous calls using **JavaScript Promises** to receive JSON data. Wrote recursive function to traverse and parse deep JSON trees to collect relevant data. Provided **REST endpoints** for remote clients. Built website to display query results using HTML, jQuery.
- Challenges: Poor planning caused us to fail to meet the first deadline. Employed advanced planning/scrum techniques to comfortably meet subsequent deadlines.
- Outcomes: Received 100% grade. Saw the benefits of **Agile/Scrum** techniques. Practiced writing code that is modular.

EXPERIENCE

Worked as Location Manager at Emdee's Fish and Chips, Belcara Regional Park, Port Moody, BC - Summers of 2013 and 2014.

MORE INFORMATION

More information about what I do can be found at evmarts.github.io/blog/ ⤤