

KESHAV CHAWLA

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keshavchawla.com

EDUCATION

University of Waterloo, Ontario

September 2020 - Present

Bachelor of Computing & Financial Management (*expected*)

CFM Mentor (2019 - 2020)

Member of the Mathematics Endowment Fund Council (F2019 & W2020)

Executive of UW DECA (2019 - 2020)

Cumulative Average: 89.67%

Specialist Major Average: 95.33%

Math Average: 85.89%

(As of Jan 2020)

EXPERIENCE

Developer Intern

Jan 2020 - Present

Jam3

Waterloo, ON

Online Learning Assistant

May 2020 - Aug 2020

University of Waterloo Faculty of Mathematics

Waterloo, ON

- Developed with faculty members the <https://latex2mobius.uwaterloo.ca/> web application using PHP, HTML, CSS, and Python to convert \LaTeX documents for online use (team of seven)
- Transformed academic content into \LaTeX to suit online delivery methods
- Converted lecture slides into videos using FFmpeg, OBS, Handbrake, and captioning software
- Worked creating digital assets, reviewing content for clarity, and testing various deployments
- Facilitated weekly initiatives to encourage peer-to-peer student engagement in an online setting
- Created multi-select variable format questions within Möbius software using Maple code

Media Coordinator

May 2018 - June 2019

DECA Ontario

Toronto, ON

- Served as a DECA Ontario Provincial Executive Officer
- Revamped the deca.ca website using WordPress, HTML, and CSS (over 200,000+ visitors per year)
- Designed digital and paper assets for all of DECA Ontario's events and conferences
- Managed all of DECA Ontario's social media channels with over 15,000+ following
- Coordinated digital media for the publication of the Provincial Program
- Filmed and edited videos for DECA Ontario's promotional media
- Negotiated corporate sponsorship donations upwards of \$2,000
- Developed the set design and graphics for DECA's Provincial Conference stage
- Advised high school students all across Ontario through workshops on DECA curriculum
- Represented DECA Ontario at the international level at conferences in Chicago, Baltimore, and Orlando

Founder

July 2017 - July 2019

Network Nights

Toronto, ON

- Organized quarterly networking conferences for the Toronto youth community
- Coordinated sponsorship donations of upwards of \$1,000 per event

- Developed and facilitated the "Hotzone" Demo presentation model to showcase new startups
- Oversaw an executive team of 10 members helping to run the organization
- Maintained Network Night's web services including hosting and GSuite

Vice President of Engagement

August 2017 - August 2018

Project 5K

Markham, ON

- Headed the Engagement department consisting of blog writers, growth analysts, and web developers
- Designed wireframes, mockups as well worked on the front-end development of the project5k.ca website
- Resolved technical issues involving hosting and AWS
- Curated content and recorded podcasts for the [Project 5K blog](#), regularly reaching 500+ views per post
- Advised other VPs and executives on direction of the organization and technical feasibility

President

August 2017 - June 2018

Markville DECA

Markham, ON

- Organized DECA Ontario's second-largest chapter
- Improved the number of international competitors by 1,500% in one year
- Created a 50-page Marketing guide for members to study for competition
- Chaired an executive team of 15 DECA students
- Formalized a Markville DECA curriculum of training resources to facilitate learning for future years
- Represented Markville DECA to other chapter delegates at various DECA Ontario events

Trainer

September 2016 - June 2018

Markville DECA

Markham, ON

- Trained all students in principle cluster categories (PMK, PBM, PFN, PHT)
- Developed weekly lessons plans and engaging activities
- Analyzed and filmed case studies for competitors
- Organized logistics for managing a 150+ student chapter
- Assisted in chapter events to raise money for local charitable organizations

Growth Analyst

August 2016 - August 2017

Project 5K

Markham, ON

- Focused on ways to grow Project 5K's reach in the greater Toronto area
- Established the Project 5K podcast interview and uploading content to Project 5K's social media channels
- Authored blog posts promoting the importance of volunteering in the community
- Participated in numerous volunteering activities supported by Project 5K in the community

Chief Technology Officer

September 2016 - July 2017

Junior Economic Club of Toronto

Toronto, ON

- Created and organized 200+ G-Suite accounts for JEC Toronto Members
- Implemented the organization website and performed routine updates
- Launched JEC Toronto's blog content management system
- Initiated SEO tactics for JEC Toronto's website

Chief Technology Officer

October 2016 - October 2017

Toronto International Affairs

Toronto, ON

- Organizing logistics to run yearly model united nation conferences
- Initiated SEO tactics for the Toronto International Affairs website

- Patched bugs within website and CMS systems
- Created a MUN committee and speakers list software for conferences

Sponsorship & Marketing Coordinator

Model City Hall

October 2016 - October 2017

Toronto, ON

- Obtained funds to operate Model City Hall's conferences
- Communicated with sponsors to provide recognition at events and social media
- Calculated finances and expenses needed to operate events
- Promoted civic engagement amongst high school students in Toronto

TECHNICAL STRENGTHS

Computer Languages	C++, C, JavaScript, Java, Racket, Turing
Tools	L ^A T _E X, HTML & CSS, WordPress, Netlify, Google Assistant SDK, Github, Vim, Git, PGP
Graphic Software	Sketch, Adobe Suite, Figma, InVision
Video Editing Software	Final Cut Pro X, iMovie, Handbrake, FFmpeg

PROJECTS

Smart Mirror

Tech Stack: PubNub Functions, Google Assistant SDK (Voice), MagicMirror², RSS Feeds, and Python

In July of 2017, I stumbled across photos and videos online of people making mirrors that could present a dashboard of widgets ranging from daily weather to any traffic delays.

I set out to build my own in the process using tutorials online and based on the MagicMirror platform run on Electron. Everything is powered through a Raspberry Pi 3 and hooked up to a 32 inch TV behind a two-way mirror.

In the process, I was able to work with PubNub's Functions, Integrating Google's Assistant Voice in the mirror, MagicMirror's software, and Canadian news RSS feeds.

I am continuously improving this project and adding/modifying features to my mirror. Just recently, I was able to use the RPiPlay repository to add Airplay functionality to the mirror. In addition to the default view, the mirror is able to mirror my phone screen or "cast" a movie from my phone to watch on the mirror.

Read more on the project and how to create your own here: <https://blog.keshavchawla.com/magic-mirror-guide>.

Personal Blog

Tech Stack: Gatsby.js, Git, Google Analytics, Google Tag Manager, Netlify CMS, and KaTeX

Built on Gatsby.js and hosted directly on [GitHub](#). Connected up to Netlify CMS for content management through the admin portal with automatic deployment. Incorporated into the blog, the KaTeX package, Google Analytics, Google Tag Manager, and imgbot.

HackTheFridge - iOS Controlled Fridge

Tech Stack: Xcode, Arduino, PHP, and Indico's Image Recognition API

As part of the HackThe6ix hackathon, I worked with a team to create a Pepsi marketing tool.

Inspired by the "I am Canadian" - Molson Canada Fridge Commercial, we converted the concept over for Pepsi/Mountain Dew into an app that gives users a list of tasks (scavenger hunt items) that need to be completed.

Once the tasks have been completed, a fridge is unlocked to receive free Mountain Dew!

LaTeX2Möbius Web Application

Tech Stack: PHP, LaTeX, HTML, CSS, and Bash

As classes moved online due to the COVID-19 pandemic, lecture content from various courses had to be transitioned to a virtual/online platform.

While working with the University, our team was tasked to create an application to convert LaTeX documents into HTML/MathML syntax (which then can be used to develop content in Möbius).

I was primarily tasked with creating the web application, which entailed handling uploading/downloading documents, .zip files, running the conversion script, file deletion, error handling, and the user interface.

Read more about the project and the user documentation here: https://latex2mobius.uwaterloo.ca/includes/L2M_Documentation.pdf.

Straights - C++ Card Game

Tech Stack: C++

The Straights game was created as the final project for CS246 Object-Oriented Software Development. The game is made using C++, uses object-oriented programming principles, and made careful considerations of design patterns. The game also employs proper use of memory management and error handling.

As part of the final project, I also created a UML diagram to describe the relationship between classes, a demo to walk through the different features, and a design document to describe the various design decisions.

DECA Ontario Website

Tech Stack: Front End Web Development, WordPress, Javascript, Web Hosting, Sketch, Adobe Illustrator, and PHP

As part of DECA Ontario's Provincial Officer team, I completely overhauled the <https://deca.ca> website. The process involved creating a system that would allow the website to showcase the strength of the organization while also making it easy to maintain and edit in the long term.

I experimented with numerous content management systems and design mockups before considering a medium that would scale. Through the process, I worked through the design process, managing web hosting, ensuring security, search engine optimization, spam management, testing, rapid deployment, bug patching, and technical support. As of 2018, the DECA Ontario website reaches 200,000+ visitors per year.

SimpleX Chrome Extension

Tech Stack: JavaScript, HTML, and CSS

SimpleX is a simple new tab page chrome extension - that's it!

Each time you visit a new tab, you can view an inspirational quote pulled from favqs.com API, the current date, and time in your set region. SimpleX is focused on keeping your digital life simple and minimal.

See the GitHub Repo here: <https://github.com/KeshavChawla/SimpleX> and download and use the chrome extension from the [chrome web store](#).

InsureMotion Hackathon Project

Tech Stack: Microsoft Azure Face Emotion Recognition API, Expo, React Native, and Sketch

InsureMotion is a mobile app that tracks your driving to determine whether or not you have a road rage problem. Stay calm and collected while driving? The app will help you reduce your insurance premiums. The app will film you while driving and look for facial expressions to detect emotion. The emotion data is used to see how calm and collected you can stay while on the road.

During the project, I had the opportunity to work with Microsoft Azure Face Emotion Recognition API and Expo for making an iOS app. While other team members worked on creating a Python Flask REST API, which would communicate with the Expo add to calculate insurance premiums.

AWARDS

Semi-finalists - <i>University of Waterloo Hult Prize</i>	2020
Term Deans Honour List Fall 2019 - <i>University of Waterloo</i>	2019
Robert J. Sproule DECA Scholarship - <i>University of Waterloo</i>	2019
President's Scholarship of Distinction - <i>University of Waterloo</i>	2019
Valedictorian - <i>Markville Secondary School</i>	2019
Director's Achievement Award - <i>Markville Secondary School</i>	2019
Business Student of the Year - <i>Markville Secondary School</i>	2019
Finalist - <i>DECA International Career Development Conference</i>	2019
PepsiCo. Chilled DSD Scholarship - <i>DECA Inc.</i>	2019
Provincial Executive Offer Scholarship - <i>DECA Ontario</i>	2019
1st Place - <i>Model City Hall Conference</i>	2019
1st Place - <i>Havergal Model United Nations Conference</i>	2019
1st Place - <i>Don Mills Model United Nations Conference</i>	2019
Harry A. Applegate Scholarship Finalist - <i>DECA Inc.</i>	2019
NAPA Scholarship Finalist - <i>DECA Inc.</i>	2019
6th Place - <i>DECA International Career Development Conference</i>	2018
1st Place in section - <i>DECA Power Conference - Baltimore</i>	2018
Provincial Champion - <i>DECA Ontario</i>	2018
1st Place - <i>Toronto Model United Nations Conference</i>	2017
1st Place York Regionals - <i>DECA Ontario</i>	2017
2nd Place - <i>TribalScale HackuWeather Hackathon</i>	2017
3rd Place - <i>Don Mills Model United Nations Conference</i>	2017
Hover Challenge Winner - <i>T.Hacks Hackathon</i>	2017
Top 5 - <i>Index Exchange #HACKWITHIX Hackathon</i>	2017
Top 10 - <i>DECA Ontario Provincial Conference</i>	2017
1st Place - <i>DECA Ontario Provincial Conference</i>	2016
3rd Place - <i>FraserHacks Hackathon</i>	2016
3rd Place - <i>Don Mills Model United Nations Conference</i>	2016
Pepsi Challenge Winner - <i>HackThe6ix</i>	2016
Top 5 Finalist - <i>Impact Tomorrow Pitch Competition</i>	2016

LICENSES AND CERTIFICATIONS

Remote Work Foundations - <i>LinkedIn</i>	2020
Time Management: Working from Home - <i>LinkedIn</i>	2020
Workplace Violence Awareness - <i>University of Waterloo</i>	2020
Accessibility Training Certification - <i>University of Waterloo</i>	2020
WHMIS 2015 Training - <i>University of Waterloo</i>	2020
Employee Safety Orientation Training - <i>University of Waterloo</i>	2020
Java AP Computer Science A Certification - <i>CodeHS</i>	2019
Canadian Ski Instructors' Alliance Level 1 Certification - <i>CSIA Ontario</i>	2016