

ARASHDEEP PANESAR

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EDUCATION:

Bachelor of Science,
Honours Mathematical Physics 2B
University of Waterloo
Expected Computing Minor

AWARDS:

A Donald Maynes Entrance
Scholarship
University of Waterloo President's
Scholarship of Distinction

COURSEWORK:

Computational Physics 1 (*Python*)
Elementary Algorithm Design &
Data Abstraction (C)
Computer Science 1 (*Racket*)
Computer Science 2 (*Python*)
Calculus 4
Probability and Statistics (R)
Quantum Physics 1

ADDITIONAL PROJECTS:

FIFA Dataset Analysis
Python, Pandas, Matplotlib
Advanced Amazon Echo
Raspberry Pi, Python, RPi.GPIO
Smart Mirror
Raspberry Pi, React, Node, Express

CERTIFICATION:

Udemy:
The Complete Web Developer 2019
Node with React: Fullstack Development
Complete Next.js with React & Node
MongoDB - Complete Developers Guide
DataCamp:
Intermediate Python for Data Science
Joining Data in SQL

TECHNICAL SKILLS

- Languages: JavaScript, Node.js, Python, PHP, Perl, C++, C, R, Racket
- Frameworks/Packages: Express, React, Redux, Next, jQuery, Django, Pandas, Matplotlib
- Databases: MongoDB, PostgreSQL, MySQL
- Markup/Styling: HTML, CSS (Bootstrap, Materialize, Reactstrap), LaTeX
- Hardware: Arduino, Raspberry Pi
- Tools/Software: Git + GitHub, AWS (heroku), Microsoft Excel, Linux, Sublime Text, Postman

WORK EXPERIENCE

Web Developer, Environment and Climate Change Canada Jan-Apr 2019
JavaScript, Python, Perl, PHP, jQuery, MySQL, HTML, Bootstrap, Matplotlib, Excel, Access, VBA

- Integrated web analytics package to [CCDS](#) website using custom JavaScript and Perl code to allow data analyst to perform analysis on the download volumes of released content
- Developed data visualization and download interfaces using Python and JavaScript resulting in a 15% increase in website traffic
- Built a database application using Django and MySQL to allow Climate Research division managers to efficiently catalog climate service inquiries
- Contributed to the digital version of [Canada's Changing Climate Report](#) which was viewed 30,000+ times in the first week of release

Co-Founder (Developer), Aman's Henna Creations May-Aug 2018
HTML, Bootstrap, jQuery, PHP, CSS, Google Maps API

- Created a business platform from scratch ([website](#), social media) to allow henna artist to showcase her henna designs and services; amassed 1500+ customers
- Used jQuery to create a functional and aesthetic gallery. As a result, business saw large volume of website traffic and sales of \$10,000+.
- Implemented a contact form using PHP to allow site visitors to send direct inquiries to the henna artist

PROJECTS

ProdEffic ([prodefficient.herokuapp.com](#)) ** currently in development **
Node, React, Express, MongoDB, Reactstrap, Google OAuth

- Dashboard application that helps boost productivity by applying the 80-20 principle
- Intend to add additional resources and eventually make this a paid service

Matrix Master ([matrixmaster.herokuapp.com](#))
React, Redux, Math.js, LaTeX

- Open source linear algebra computations website that helps teach linear algebra concepts
- Instructed 5+ contributors on GitHub to make specific changes to product

SurveyStats ([surveystats.herokuapp.com](#))
React, Redux, Node, Express, MongoDB, Stripe, Google OAuth, SendGrid

- Web application that allows user to send yes/no question to customers on a mailing list; showcases the responses on users profile

Personal Portfolio ([arashdeep.herokuapp.com](#))
Next.js, React, Node, Express, MongoDB, Reactstrap, Slate, Auth0

- Portfolio website that gives site owner additional privileges to edit contents of site
- Uses Slate editor to allow owner to write and post blogs

Image Recognition App ([source code](#))
React, Node, Express, PostgreSQL, Clarifai API

- Web application that uses a machine learning API to create boxes around the faces in an image uploaded by user

ACTIVITIES

Robotics, Turner Fenton Secondary School Jan-Dec 2016
C++, Arduino

- Worked alongside a team of 5 individuals to build a robot that is able to follow a black line using infrared radiation sensors
- Robot came 4th place in the Peels Skills Challenge robotics tournament

Additional: Muay Thai, Soccer Coach, Physics Club Mentor, Math Tutor (Kumon)