# Hassaan Ali Wattoo

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## SKILLS

Proficient in Python, Web Scraping, React, C++, Heroku, Git, CSS. Experience with GoLang, SQLite and MySQL.

## PROJECTS

**GradeGuide -** *https://gradeguide.com* - Flask, ReactJS, SQLite, BeautifulSoup, SASS

- Part of team that built a web app to host and display U.M. course grade data, using Python and JavaScript-based data visualization tools, with a focus on an easily modified and scalable platform. Received 90000 visits within the initial release and registration period.
- Developed database structure and application API in Python. Setup testing environment, wrote bash scripts to automate project setup and installation. Integrated CI system to allow seamless deployment.

**CaptionGen -** *http://project.wattoo.me/captions* - Flask, jQuery, Requests, PostgreSQL, Google Vision

- Created a Javascript and Flask (Python) based web application that leverages Google Vision APIs to generate image captions based on objects present in the image**.**

**ChromePass -** *https://github.com/hassaanaliw/chromepass* -  Python

- Identified how Google Chrome stored passwords in plaintext on some operating systems and developed a tool to retrieve the passwords and export them into human friendly formats.

## EXPERIENCE

**The Michigan Daily** - *Senior Online Editor*                             **October 2017 - Present**

- Developer for GradeGuide, a web application for visualising course data at the University of Michigan.

**Punjab IT Board** - *Software Development Intern*                     **May 2018 - August 2018**

- Developed database analysis software for the Punjab Public Management Reform Program (PPMRP) department that detected data duplication in their databases.
- Analysed and reviewed applications from 4 different departments serving hundreds of thousands of civilians and staff members across the province. Suggested model for creating an integrated dashboard for the departments to enable smoother decision making.

**Next Generation Pakistan** - *Director Information Technology*          **Sept 2016 - Sept 2017**

- Rewrote and managed Wordpress website to be mobile responsive and more efficient.
- Also served as volunteer teacher of Dramatics, English and Problem Solving at associated underprivileged schools adopted by the organisation.

## EDUCATION

**University of Michigan** - *B.S.E. in Computer Science Engineering*     **Sept 2017 - Apr 2020 (Expected)**

- Junior Academic Standing. Peer Mentor for Living Arts Learning Community
- **Completed coursework:**  Discrete Math, Data Structures, Entrepreneurial Design: IoT Devices, Differential Equations, Multivariable Calculus, Autonomous Electronic Systems, Creative Process

## AWARDS

- **President of Pakistan Gold Medal** for excellence in Academics at Aitchison College (high school) across 12 years.
- **SOFTEC 2016 Web Development First Prize** and $500 for developing an eCommerce website as the only high school team at the university level competition.