Hassaan Ali

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Education

University of Michigan - Ann Arbor   Ann Arbor, MI
Bachelor of Engineering in Computer Science, *GPA: 3.58/4.00*   Sep 2017 - April 2021
College of Engineering Deans Honor List 2018, 2019

Relevant Coursework
- **EECS** - *Data Structures and Algorithms, Web Systems, Foundations of Computer Science, Computer Organization*
- **Creative Thinking** - *Introduction to Creative Process, Entrepreneurial Design, Graphic Design, Creative Writing (Poetry)*

Work Experience

Managing Web Developer   Ann Arbor, MI
The Michigan Daily   November 2018 - December 2020
- Responsible for maintaining, developing and progressing the digital presence of The Michigan Daily.
- In charge of ideating new projects, managing existing product initiatives and teams, and coordinating tasks with a SCRUM team of 25+ designers and developers.
- Managing the product design and development for GradeGuide.com, driving over 100,000 uses since its release.
- Leading the development of native mobile applications to deliver Michigan Daily news to mobile platforms.

Instructional Aide   Ann Arbor, MI
University of Michigan EECS   August 2019 - Present
- Instructional aide for EECS 485: Web Systems, a wholistic course of modern web systems, covering front end and back end.
- Leading a lab discussion session, responsible for maintaining class project specifications and developing exam content.

Undergraduate Research Assistant   Ann Arbor, MI
University of Michigan EECS   May 2019 - August 2019
- Conducted research on Election Cybersecurity under Professor Alex Halderman.
- Developed web application to allow election officials to fully audit election results through different Risk Limiting Audit implementations.
- Successfully demoed election audit systems at pilot audits in several towns in Michigan.
- Completely ported legacy web application code to a fully ReactJS based implementation.

Skills

Languages:	C++, Python, Javascript, GoLang, MySQL/Postgres, HTML/CSS, Bash
Tools:	Flask, Git, Heroku, Docker, Unit Testing

Projects

GradeGuide
Lead Developer and Manager   January 2018 - December 2020
- Developed backend and frontend for a grade distribution visualizer for courses at the University of Michigan.
- Created Flask API and MySQL Database structure, focusing on speed optimization and caching of responses. Achieved sub 100ms response times on all API calls on campus WIFI.
- Led marketing efforts and user studies to maximize user interaction. Driven over 100,000 uses since release.
- Developed frontend search system and course grade visualisations in ReactJS and D3.js.
- Now leading efforts to expand GradeGuide to other schools such as MSU as well as to allow user contributed content such as class reviews.

ElectionAudits
Lead Developer (Python, ReactJS, CSS)   May 2019 - August 2019
- ElectionAudits is a web application being developed to assist election officials in verifying the results of elections
- Serving as the main backend and front developer for this application, implementing brand new election audit systems in Python and ReactJS.
- Led drive to focus on user experience, providing an accessible and seamless way to audit elections for all potential users.
- Updated and rewrote existing code to match modern standards, added unit tests and updated documentation.
- Tested system at real world pilot audits in Michigan, aiming to release the application in time for the 2020 election cycle.

Awards and Certifications

President of Pakistan Gold Medal   Aitchison College
Graduated with the highest achievement in Academics across 12 years at Aitchison College.   September 2005 - May 2017

Additional Information and Extracurriculars

Peer Mentor and Member - Living Arts Residential Community   October 2017 - April 2019
Spoken Languages - (Fluent) English, Hindi, Urdu, (Basic) French