

# DARSHIL PATEL

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## Skills

### PROGRAMMING LANGUAGES

C++  
Python  
Matlab  
LT Spice  
HMTL/CSS  
Jinja

### PROGRAMMING SKILLS

Full Stack Development  
Web Development

### DATABASES

SQL

### FRAMEWORKS

Flask

### LANGUAGE PROFICIENCY

English  
Spanish  
Hindi  
Gujarati

## Education

### University of Michigan - Ann Arbor

B.S.E Computer Engineering 2020

Relevant Coursework: Intro to Electric Circuits (EECS 215), Programming and Data Structures (EECS 280), Discrete Math (EECS 203), Electromagnetics I (EECS 230), Data Structures and Algorithms (EECS 281)

Awards: Dean's List, University Honors

## Employment

### Zione Solutions

*Software Engineer Intern*

Farmington, MI  
May 2018 to Sept. 2018

- Created a ticketing service using Flask web framework and incorporating Python, SQL, and HTML/CSS
- Full-Stack Software Engineering with emphasis on back-end
- Developed Authentication/Authorization methods to ensure standard security practices
- Released the web application internally to be used by consultants at Zione Solutions

### Oakbrook Elementary and Heritage Junior High

*Tutor*

Sterling Heights, MI  
Sept. 2014 to May 2016

- Guided young students through problem sets to develop analytical skills to succeed in coursework
- Developed worksheets to guide students through a thinking process in order to successfully complete problems

### Dream Auto Sales

*Sales Associate*

Shelby Township, MI  
May 2017 to Sept. 2017

- Managed sales department by recognizing the complexities of organization, security, and maintenance
- Developed sales strategies and communication skills, while also maintaining a user-friendly website to increase sales

## Projects

### It's a Secret!

Aug. 2018

- Use Python and Flask Framework to make a web application that allows users to encrypt and send messages to others
- Users can then decrypt the message using the specific key they have

### Euchre (C++)

Oct. 2017

- Designed and executed a program to simulate actual gameplay of the card game, Euchre
- Programmed the application to sanitize user input and used classes and structs to generate AI strategy

### Signal Filters (Circuits)

Nov. 2017

- Created lowpass, highpass, bandpass, and bandreject filters with capacitors, inductors, resistors, and op amps
- Worked with the transfer functions of the first-order and second-order filters to recognize and interpret trends

### Piazza Post Classifier (C++)

Dec. 2017

- Used basic machine learning concepts to build a classifier that separates Piazza posts based on words and phrases
- Programmed the application by using data structures such as Binary Search Trees, Maps, and Sets

## Activities

MHEAL • Software Team

Indian American Student Association • Member

FIRST Robotics • ThunderChickens