

SAMARTH PATEL

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EDUCATION

Rensselaer Polytechnic Institute (RPI), Sophomore

B.S. in Computer Science

Upsilon Pi Epsilon, International Society for Computing

Expected May 2021

GPA: 3.8

Awards

- Dean's Honor List
 - Archimedean Award *for Academic Excellence*
 - Wolfram Award *for presenting "Trash Tag Locator" at HackRPI*
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Relevant Coursework

- Data Structures
 - Algorithms
 - Discrete Math
 - Computer Architecture
 - Software Design
 - Differential Equations
 - Multivariable Calculus and Linear Algebra
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PERSONAL PROJECTS

eCommerce Website

- Created a website for a local party supply company
- Uses ReactJS, Gatsby Server Side Rendering, MongoDB, and Google Cloud Platform

Cross Platform Application Development

- Published an app for iOS and Android to search, filter, and read PDF files
- Keeps up to 12gb of files locally synchronized for offline use
- Uses React Native, Kotlin, Swift, PHP, SQL

Web Dashboard for MySQL database

- Created a website and server interface to modify arbitrary MySQL database tables
 - Securely designed to prevent SQL injection and XSS attacks
 - Uses ReactJS, AG-Grid, Gatsby Server Side Rendering, PHP, and MySQL
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Research

Machine Learning Recipe Substitutions – IBM Center at RPI December 2018 – Present

- Use Machine Learning to automatically derive ingredient substitutions
- Uses recipe substitutions to modify recipes based on a user's dietary substitutions

Image Processing - Visual Interfaces Lab at Rutgers University May 2019 - Present

- Worked with a dataset of blueprint images and extracted additional features for creating floorplan similarity embeddings
 - Used OpenCV and image processing techniques to automate room connectivity detection, window detection, and adjacency matrix generation
 - Submitted research paper for review and published the dataset for open use
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ACTIVITIES

Member, Formula SAE Motorsport Team

October 2018 - Present

- Manufacture parts for a collegiate level formula racing competition
- Designed and programed an algorithm for automatic gear shifting

Developer, Rensselaer Center for Open Source

September 2019 - Present

- Contribute to LATE, an open source website for scheduling work
- Develop full stack skills with VueJS, MongoDB, and Koa

Certified EMT, South Plainfield First Aid Squad

October 2017 - June 2018

President, FIRST Robotics Competition Team

June 2014 - June 2018