

Rish Shadra

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Profile

Computer Science and Engineering freshman who is passionate about machine learning, artificial intelligence, information security, and cloud-based technologies. Looking to apply the knowledge gained over the course of my studies to solve real-world problems in the computer software industry.

Academics

Rensselaer Polytechnic Institute, Class of 2020

Bachelor of Science, Computer Systems Engineering and Computer Science, GPA: 3.3

Coursework

Biology, Computer Science 1, Calculus 1, Calculus 2, Physics 1, Introduction to Electrical Engineering, Introduction to CAD, Data Structures, Differential Equations; currently taking: Foundations of Computer Science, Computer Components and Optimizations, Embedded Control, and Psychology,

Skills

Basic: Wireshark

Moderate: JavaScript, MatLab, Git, Maven, Ant, HTML5, CSS3, Bootstrap, Siemens NX

Advanced: Java, JSP, C, C++, MySQL, Linux, Windows, MS Office

APIs: Google Maps, Gmail, JDBC, C3P0 Connection Pooling, jQuery, GRIP Vision.

Projects

Electronic Door Opener: Opens a locked door when it recognizes a knock pattern

- Uses a piezoelectric sensor connected to a micro-controller to detect door knocks
- Designed circuit to drive a motor to open the door when the correct pattern is detected
- Knock pattern recognition software written in C
- Motor mount designed in Siemens NX and 3D printed

Restaurant Bill Splitter: Allows groups of friends to split bills easily via image recognition

- Implemented in JavaScript and PHP
- Used Tesseract API to recognize text on images of receipts
- Won first prize at the RPI freshman hackathon

NHS Hour Tracker: Tracks volunteer hours of club members with approval and confirmation emails

- Implemented in JavaScript and JSP
- Gmail API for mail processing

Peer Tutoring: Matched students with tutors based on schedule and course load constraints

- Implemented in JavaScript and JSP
- High school capstone project

Markov Text: Creates natural-sounding filler text using a model generated from Facebook posts

- Implemented using Java, MySQL, JDBC
- Created a text generating Markov Model by ingesting user posts from Facebook into a MySQL database

Robot Vision Processing: Created a system allowing the driver of a robot to target goal posts for FIRST team

- Used Java and the GRIP vision processing API
- Used in FIRST Robotics season 2015-16

Extracurricular

RPISec: Involved in capture-the-flag style computer security competitions

Rensselaer Astrophysical Society: Planning outreach events and public observing sessions

Resident Student Association: President of Cary Hall council with the responsibility of planning events for its ~150 residents