

# Viral Patel

Systems Design Engineering

 viralpatel.me  
 viral-p  
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## SKILLS

<b>Programming languages</b>	Java, C++, JavaScript, SQL, HTML, CSS, PHP, VBA
<b>Technologies</b>	Android, web development, Arduino, FIRST and VEX Robotics
<b>Design and CAD</b>	SolidWorks, Autodesk Inventor, F1 in Schools
<b>Web Development</b>	Parse, Polymer, MEAN Stack, REST API

## EXPERIENCE

### Java Developer, Outside IQ Sept – Dec 2015

- Fixed bugs in **data extraction** by using **APIs**, **web crawling** protocols, and **XPath extraction**, resulting in more accurate profile generation
- Worked closely with company querying APIs (**Google Maps**, **Yelp**, **Yellow Pages**, etc.) to filter results and reduce false positives in the final product
- Repaired incorrect data representation in application UI using JavaScript, **AngularJS**, and regular expressions

### Quality Assurance Analyst, Nexj Systems Jan – April 2015

- Worked in an **agile** scrum team that built new features for capital markets and financial securities in a market leading CRM application
- Tested new features, verified bug fixes, ran **regression tests** on new releases, and wrote test cases for financial securities, ensuring the shipment of functional code

### Team President/Control Systems Lead, FRC Team 188 Sept 2011 – June 2014

- Recognized as **Dean's List Semi Finalist** from 80 students for leadership and community involvement
- **Control Systems Team Lead**: programmed **robots in Java**, wiring control components (power distribution, sensors, pneumatics)
- **Effectively communicated** robot design, programming, and the design process with industry professionals

### FIRST Mentor & Volunteer Dec 2011-present

- **Control Systems Advisor**: assisted FRC teams in matters concerning the robot control system
- **Mentor**: offer expertise in programming, control systems, and strategy, while inspiring an interest in STEM
- **FLL Referee**: responsible for refereeing matches and relayed information about the game

## PROJECTS

### Arduino Piano July 2015

- Build an 12-key piano that can record and playback a melody using an **Arduino** microcontroller and knowledge of interrupts and timers

### FRC Scouting Web App: Outpost Jan – April 2015

- Built a data collecting web app with a **Polymer UI** and an PHP/SQL backend and **REST API**, in order to enhance the team's strategy development process during the competition

### UofT Hacks: Promptr Feb 2015

- Built the **data schema** and API for a prompt based blogging platform. Used **JavaScript** and **Parse**

### Physics Simulator Android App April – May 2014

- Developed an Android app to process and display collisions, motion, and forces. Ran scrum meetings with a team of four to ensure successful deployment

## EDUCATION

Candidate for Systems Design Engineering, University of Waterloo

*Sept. 2014 – present*

## ACTIVITIES/INTERESTS

Competitive robotics	Ultimate Frisbee
Flautist	Badminton