

# Indranil Sen – 2B Computer Engineering

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## Summary

- Demonstrated entrepreneurship and engineering leadership by **winning 1st place at Microsoft Hacks**
- Developed production **features for Texas Instruments'** Resource Explorer cloud & desktop tool
- Received the **"Top Contributor Award"** among 133 interns at Manulife/John Hancock
- Co-founder of Influx; **earned a \$120,000 IBM grant** for crafting a cutting-edge VR platform

## Relevant Experience

**Software Engineering Intern** [Employer Evaluation : Outstanding] Jan 2017 – Apr 2017  
Texas Instruments, Inc. Toronto, Canada

- Redesigned the core download & install procedures for better efficiency and to facilitate new future features
- Augmented Resource Explorer's in-house analytics engine with new features and better data resolution
- Integrated a tag-management system to the code base, allowing marketing teams to monitor live analytics
- Added ability to monitor real-time database refresh using server-sent events
- Closed 57 issues throughout the internship with 212 code-reviewed contributions to the master branch

**Full Stack Developer** [Employer Evaluation : Outstanding] May 2016 – Aug 2016  
Manulife/John Hancock LOFT: Lab of Forward Thinking Toronto, Canada

- Used agile methodologies to develop a multi-million-dollar revolutionary client tool
- Independently developed features and pushed patches to the production codebase
- Created a powerful script that reduces project setup time by 15%
- Used industry best practices and design patterns to develop modular and repeatable code

**Co-Founder** Aug 2015 – Apr 2016  
Influx London, Canada

- Designed a web platform for virtual reality including the front-end service using AngularJS
- Secured \$120,000 in credit funding from IBM's Global Entrepreneurship Program

## Skills

Languages	C, C++, Java, JavaScript, Python, Bash, Matlab
Web Development	Node.js/Express, Web Scraping, Data Mining, Redis, jQuery, AngularJS, REST APIs, FlexBox, MongoDB, Gulp, HTML, CSS
Hardware	ARM RISC ISA, Low-level C/C++, Assembly, FPGAs, VHDL, Arduino, Raspberry Pi

## Projects

ParkSafe	Tackles the prevalent issue of bike-theft and won 1st place at Microsoft Hacks <a href="#">NodeJS</a> , <a href="#">AngularJS</a> , <a href="#">MongoDB</a> , <a href="#">Mongoose ORM</a> , <a href="#">Express</a> , <a href="#">PassportJS</a>
Cartastic	Uses Computer Vision to detect ingredients and recommends recipes based on it <a href="#">Node.js</a> , <a href="#">iOS</a>
Web-App Builder	Saves hours by dynamically creating a web-app boilerplate with user specifications <a href="#">Bash</a> , <a href="#">Ruby</a> , <a href="#">Homebrew Deployment</a>
Student Finance Tracker	A robust and light weight app that helps students manage their finances <a href="#">Java</a> , <a href="#">Apache POI</a> , <a href="#">Heavily Object Oriented Desktop App</a>
3-Axes Accelerometer	An alternate analog system to detect 3D tilt; 2nd place in Science & Engineering Fair <a href="#">Digital Circuits – Logic Gates, Timers</a> , <a href="#">Circuit Design Principles</a>
Quad-Legged Walker-Bot	A terrestrial-locomotive robot with obstacle-detection from custom sensors <a href="#">C</a> , <a href="#">Circuit Design Principles</a> , <a href="#">Arduino</a>

## Education

BASc Computer Engineering, University of Waterloo	Sep 2015 - present
• Earned \$28,500 in entrance scholarships as the top ECE undergraduate (Class of 2020)	
Valedictorian, Catholic Central High School	Sep 2011 – Jun 2015