## **BOBBY RANJAN**

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Currently looking for an internship from May - July 2017

#### Education

#### **Nanyang Technological University**

B.Eng. in Computer Engineering Minor in Entrepreneurship & Life Sciences CGPA - 4.60/5.00 | Ex. Graduation - June 2018

#### **Vikhe Patil Memorial School**

Grade 12 | CBSE Board Examinations (Alevel equivalent) | Science Stream School Topper with 96.8% | May 2014

#### Skills

#### **Programming Languages:**

Java • Python • C • C++

#### Web Development:

HTML5 + CSS3 • JavaScript • jQuery • Bootstrap • PHP • JSP • Django • AngularJS • Node.js • MongoDB • ActiveMQ

Other:

Git • Heroku • SQL • Android • Firebase • Spring • Gradle • JUnit

# Hardware Skills:

Circuit Design • XPPAUT • MATLAB • Arduino • ARM Cortex M4

#### Co-Curricular Activities

IEEE NTU Student Branch | Vice President NTU Sikh Society | Publicity Director NTU Model United Nations | Media NTU Students' Union | Events Director

#### **Selected Courses**

Discrete Mathematics

Algorithms

Data Structures

**Operating Systems** 

Digital Systems Design

Software Engineering

Sensors, Interfacing & Control Systems

Microcontroller Programming

Computer Networks

Molecular & Cell Biology

Entrepreneurship for New Ventures Introduction to Forensic Science (Coursera) Computational Neuroscience (Coursera)

Chinese Language Level 1

#### Interests

Biotechnology • Hackathons • FIFA • Football (Soccer) • Table Tennis • Singing

## Fun Facts

- ✓ Invited to UC Berkeley in June 2013 for National Student Leadership Conference (NSLC)
- Possesses DELF A2 diploma in French from Ministry of Education, France
- ✓ Performed in a university-wide dance concert in front of over 300 people

#### Experience

#### Technology Analyst Intern | Bank of America, Merrill Lynch

August - December 2016 | Singapore

- Used message queues to improve efficiency of payment processing system
- Built a proof-of-concept (POC) for Payments Auto Tester v2.0
- Tech stack includes AngularJS, Java Spring, ActiveMQ, MyBatis & SQL

## Summer Intern | Asia Risk Transfer Solutions (ARTS)

May 2016 - July 2016 | Singapore

ARTS is a software and tech. solutions startup that aims to help create and manage risk transfer products for developing communities in Asia

- Worked in a small team of 6 on Android development for the company
- Developed 2 MVP Android applications for different user groups
- Enhanced server-side API of the enterprise web application
- Tech stack includes Java, Android and Django

#### President's Research Scholar | Nanyang Technological University

August 2015 – June 2016 | Singapore

**Project Title:** Mathematical modelling of calcium signalling for regulation of neuronal cell death in Alzheimer's Disease

- Used XPPAUT and MATLAB for modelling purposes
- Presented research paper at an international conference (ICUR-URECA 2016)
- Paper publication is in progress

### **Selected Projects**

CodeBot | Facebook Singapore Hackathon 2016 | September 2016

- CodeBot is interactive chatbot that helps beginners learn how to code with witty replies, GIFs and human-readable errors
- Tech stack includes MongoDB, api.ai, Node.js, HTML, CSS & JavaScript

BrainAid | Garage@EEE | July 2016 - Present

- BrainAid is a portable functional Near-Infrared Spectroscopy (fNIRS) head gear to scan for hematomas following head injury
- Uses an Arduino Uno, Raspberry Pi & Android application

TripBuddy.SG | Co-Founder | September 2015 - Present

- TripBuddy.SG is an online platform that allows local students to host short trips for foreign students to encourage cultural exchange within the university community
- Online platform built on Django & PostgreSQL with HTML, CSS & JS for the frontend – undergoing beta testing

WhyBills | Facebook Singapore Hackathon 2015 | February 2015

- A system designed to eliminate printed bills at any point of sale (POS)
- Retailers can encode their bill, generate a QR Code on the POS System and display this QR Code to the customer as a receipt
- Tech stack includes XML, Java (Android) & SQLite

When We Meet Again | NUS Hack & Roll 2015 | January 2015

- When We Meet Again is an Android application that uses the relative distance between users, determined using the phone's Bluetooth, to trigger a reminder/push notification
- Won 'Best Freshmen/Non-Tertiary Award' at NUS Hack & Roll 2015.
- Tech stack includes XML, Java (Android) & SQLite

### Achievements & Awards

Singapore Finalist | Schneider Electric - Go Green in the City 2016 | May 2016 | National Finalist | Deloitte Risk Intelligence Challenge 2016 | March 2016

Best Freshmen Award | NUS Hack & Roll 2015 | January 2015

All India Rank 1820 | IIT JEE Advanced (India) | May 2014

All India Rank 3 scoring 98.2% | ICSE Board (O-level equivalent) | May 2012