BOBBY RANJAN

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Education

Nanyang Technological University
B.Eng. in Computer Engineering
Minor in Entrepreneurship & Life Sciences
CGPA - 4.6 on 5 | Ex. Graduation - June 2018

Vikhe Patil Memorial School
Grade 12 | CBSE Board Examinations (A-level equivalent) | Science Stream
School Topper with 96.8% | May 2014

Skills

Programming Languages:
Java • Python • C • C++
Web Development:
HTML5 + CSS3 • JavaScript • jQuery • Bootstrap • Django • AngularJS
Other:
Git • Android • XPPAUT • SQL
Hardware Skills:
Circuit Design • MATLAB • Arduino

Co-Curricular Activities

IEEE NTU Student Branch | Vice President
NTU Sikh Society | Publicity Director
NTU Model United Nations | Media
(Built the website www.ntumun.com)
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
Computational Neuroscience

Interests

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

Fun Facts

- ✓ Visited 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
- ✓ Is a huge supporter of Manchester United Football Club

Experience

Technology Analyst Intern | Bank of America, Merrill Lynch
August – December 2016 | Singapore
- Used multi-threading to improve efficiency of payments system
- Built a proof-of-concept (POC) for Payments Auto Tester v2.0
- Tech Stack includes AngularJS, Java Spring & 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
- Modelled the process by which neuronal cell death can be regulated by calcium signalling in Alzheimer's Disease
- Used XPPAUT and MATLAB for modelling purposes
- Paper publication is in progress

Selected Projects

BrainAid | Garage@EEE | July 2016 - Present
- BrainAid is a portable functional Near-Infrared Spectroscopy (fNIRS) head gear to scan for subdural hematoma
- Currently in the process of designing using SolidWorks & CADSoft Eagle
- Built using an Arduino Uno, Raspberry Pi & Android

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

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

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

WhyBills | Facebook Singapore Hackathon 2015 | September 2016
- 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

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