

# BOBBY RANJAN

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| Education   | Experience  |
|---|---|
| <b>Nanyang Technological University</b><br>B.Eng. in Computer Engineering<br>Minor in Entrepreneurship & Life Sciences<br>CGPA - 4.60/5.00   Ex. Graduation - June 2018<br><b>Vikhe Patil Memorial School</b><br>Grade 12   CBSE Board Examinations (A-level equivalent)   Science Stream<br>School Topper with 96.8%   May 2014  | <b>Technology Analyst Intern   Bank of America, Merrill Lynch</b><br>August – December 2016   Singapore <ul style="list-style-type: none"><li>Used multi-threading to improve efficiency of payments system</li><li>Built a proof-of-concept (POC) for Payments Auto Tester v2.0</li><li>Tech stack includes AngularJS, Java Spring &amp; SQL</li></ul> <b>Summer Intern   Asia Risk Transfer Solutions (ARTS)</b><br>May 2016 – July 2016   Singapore<br>ARTS is a software and tech. solutions startup that aims to help create and manage risk transfer products for developing communities in Asia. <ul style="list-style-type: none"><li>Worked in a small team of 6 on Android development for the company</li><li>Developed 2 MVP Android applications for different user groups</li><li>Enhanced server-side API of the enterprise web application</li><li>Tech stack includes Java, Android and Django</li></ul>   |
| Skills  | President's Research Scholar   Nanyang Technological University   |
| <b>Programming Languages:</b><br>Java • Python • C • C++<br><b>Web Development:</b><br>HTML5 + CSS3 • JavaScript • jQuery • Bootstrap • Django • AngularJS<br><b>Other:</b><br>Git • Android • XPPAUT • SQL<br><b>Hardware Skills:</b><br>Circuit Design • MATLAB • Arduino   | August 2015 – June 2016   Singapore<br><b>Project Title:</b> Mathematical modelling of calcium signalling for regulation of neuronal cell death in Alzheimer's Disease <ul style="list-style-type: none"><li>Modelled the process by which neuronal cell death can be regulated by calcium signalling in Alzheimer's Disease</li><li>Used XPPAUT and MATLAB for modelling purposes</li><li>Paper publication is in progress</li></ul>   |
| Co-Curricular Activities  | Selected Projects   |
| IEEE NTU Student Branch   Vice President<br>NTU Sikh Society   Publicity Director<br>NTU Model United Nations   Media<br>(Built the website www.ntumun.com)<br>NTU Students' Union   Events Director  | <b>CodeBot</b>   Facebook Singapore Hackathon 2016   September 2016 <ul style="list-style-type: none"><li>CodeBot is interactive chatbot that helps beginners learn how to code with witty replies, GIFs and human-readable errors</li><li>Tech stack includes MongoDB, api.ai, Node.js, HTML, CSS &amp; JavaScript</li></ul> <b>BrainAid</b>   Garage@EEE   July 2016 - Present <ul style="list-style-type: none"><li>BrainAid is a portable functional Near-Infrared Spectroscopy (fNIRS) head gear to scan for hematomas following head injury</li><li>Currently in the process of designing using SolidWorks &amp; CADSoft Eagle</li><li>Built using an Arduino Uno, Raspberry Pi &amp; Android</li></ul> <b>TripBuddy.SG</b>   Co-Founder   September 2015 - Present <ul style="list-style-type: none"><li>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</li><li>Online platform built on Django &amp; PostgreSQL with HTML, CSS &amp; JS for the frontend – undergoing beta testing</li></ul> |
| Selected Courses  | WhyBills   Facebook Singapore Hackathon 2015   February 2015  |
| Discrete Mathematics<br>Algorithms<br>Data Structures<br>Operating Systems<br>Digital Systems Design<br>Software Engineering<br>Sensors, Interfacing & Control Systems<br>Microcontroller Programming<br>Computer Networks<br>Molecular & Cell Biology<br>Entrepreneurship for New Ventures<br>Introduction to Forensic Science<br>Computational Neuroscience<br>Chinese Language Level 1 | <ul style="list-style-type: none"><li>A system designed to eliminate printed bills at any point of sale (POS)</li><li>Retailers can encode their bill, generate a QR Code on the POS System and display this QR Code to the customer as a receipt</li><li>Tech stack includes XML, Java (Android) &amp; SQLite</li></ul>  |
| Interests   | When We Meet Again   NUS Hack & Roll 2015   January 2015  |
| Biotechnology • Hackathons • FIFA • Football (Soccer) • Table Tennis • Singing  | <ul style="list-style-type: none"><li>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</li><li>Won 'Best Freshmen/Non-Tertiary Award' at NUS Hack &amp; Roll 2015.</li><li>Tech stack includes XML, Java (Android) &amp; SQLite</li></ul>  |
| Fun Facts   | Achievements & Awards   |
| ✓ Invited to UC Berkeley in June 2013 for National Student Leadership Conference (NSLC)<br>✓ Possesses DELF A2 diploma in French from Ministry of Education, France<br>✓ Performed in a university-wide dance concert in front of over 300 people<br>✓ Is a huge supporter of Manchester United Football Club   | <b>Singapore Finalist</b>   Schneider Electric - Go Green in the City 2016   May 2016<br><b>National Finalist</b>   Deloitte Risk Intelligence Challenge 2016   March 2016<br><b>Best Freshmen Award</b>   NUS Hack & Roll 2015   January 2015<br><b>All India Rank 1820</b>   IIT JEE Advanced (India)   May 2014<br><b>All India Rank 3 scoring 98.2%</b>   ICSE Board (O-level equivalent)   May 2012  |