

# BOBBY RANJAN

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Education	Experience
<b>Nanyang Technological University</b> B.Eng. in Computer Engineering Minor in Entrepreneurship & Life Sciences CGPA - 4.54/5.00   Ex. Graduation - June 2018 <b>Vikhe Patil Memorial School</b> Grade 12   CBSE Board Examinations (A-level equivalent)   Science Stream School Topper with 96.8%   May 2014	<b>Software Design Engineer Intern   BitTitan</b> May 2017 – August 2017   Singapore <ul style="list-style-type: none"><li>Built customer-facing license consumption report for all BitTitan products</li><li>Conducted tech feasibility analysis to improve BitTitan's reporting capacity</li><li>Built code analysis tool to clean up database references across codebase</li><li>Tech stack includes C#, SQL and Microsoft Roslyn</li></ul> <b>Technology Analyst Intern   Bank of America, Merrill Lynch</b> August 2016 – December 2016   Singapore <ul style="list-style-type: none"><li>Used message queues to improve efficiency of payment processing system</li><li>Built a proof-of-concept (POC) to help onboard new testers onto platform</li><li>Tech stack includes AngularJS, Java Spring, ActiveMQ, MyBatis &amp; SQL</li></ul> <b>Summer Intern   Asia Risk Transfer Solutions (ARTS)</b> May 2016 – July 2016   Singapore ARTS is a software and technology solutions startup that aims to help create and manage risk transfer products for developing communities in Asia <ul style="list-style-type: none"><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> <b>President's Research Scholar   Nanyang Technological University</b> August 2015 – June 2016   Singapore <b>Project Title:</b> Composite mathematical modelling of calcium signalling behind neuronal cell death in Alzheimer's disease <ul style="list-style-type: none"><li>Used XPPAUT and MATLAB for modelling</li><li>Paper accepted for publication in BMC Systems Biology</li><li>Presented paper at APBC 2018 (Yokohama, Japan)</li></ul>
Skills	Selected Projects
<b>Programming Languages:</b> Java • Python • C# • C <b>Web Development:</b> HTML5 + CSS3 • JavaScript • jQuery • Bootstrap • PHP • JSP • Django • AngularJS • Node.js • MongoDB • ActiveMQ <b>Other Software Skills:</b> Git • Heroku • SQL • Android • Firebase • Spring • Gradle • JUnit • Roslyn <b>Hardware Skills:</b> Circuit Design • XPPAUT • MATLAB • Arduino • ARM Cortex M4 • Raspberry Pi	<b>ContextNewsBot   NUS Hack &amp; Roll 2018   January 2018</b> <ul style="list-style-type: none"><li>A Chrome extension that provides a diverse set of news articles and objective Wikipedia links for any tweet on your Twitter timeline.</li><li>Won <b>Top 8 prize &amp; Most Socially Useful Hack</b> award at NUS Hack &amp; Roll 2018.</li><li>Uses a Flask server with Twitter and news APIs, and a custom NLP pipeline</li></ul> <b>Protein Interaction Networks   Final Year Project, NTU   August 2017 - Present</b> <ul style="list-style-type: none"><li>Applied module detection and clustering algorithms to help researchers identify significant modules in Protein Interaction Networks (PIN).</li><li>Developed Cytoscape plugin using Java; used Python for network analysis.</li></ul> <b>CommandPlus   NUS Hack &amp; Roll 2017   January 2017</b> <ul style="list-style-type: none"><li>A Chrome extension providing hand gesture-based control of one's browser.</li><li>Won <b>People's Choice Award</b> at NUS Hack &amp; Roll 2017.</li><li>Built using OpenCV, WebSockets and JavaScript.</li></ul> <b>CodeBot   Facebook Singapore Hackathon 2016   September 2016</b> <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>When We Meet Again   NUS Hack &amp; Roll 2015   January 2015</b> <ul style="list-style-type: none"><li>An Android app that uses the relative distance between users, determined using the phone's Bluetooth, to trigger a reminder/push notification.</li><li>Won <b>Best Freshmen/Non-Tertiary Award</b> at NUS Hack &amp; Roll 2015.</li><li>Tech stack includes XML, Java (Android) &amp; SQLite.</li></ul>
Co-Curricular Activities	Achievements & Awards
<b>IEEE NTU Student Branch   Vice President</b> <b>NTU Sikh Society   Publicity Director</b> <b>NTU Model United Nations   Media</b> <b>NTU Students' Union   Events Director</b>	<b>Top 8 &amp; Most Socially Useful Award   NUS Hack &amp; Roll 2018   January 2018</b> <b>People's Choice Award   NUS Hack &amp; Roll 2017   January 2017</b> <b>Best Freshmen Award   NUS Hack &amp; Roll 2015   January 2015</b> <b>All India Rank 1820   IIT JEE Advanced (India)   May 2014</b> <b>All India Rank 3 scoring 98.2%   ICSE Board (O-level equivalent)   May 2012</b>
Selected Courses	
Machine Learning Computer Vision Advanced Algorithms Distributed Systems Information Retrieval Operating Systems Introduction to Databases Digital Systems Design Software Engineering Sensors, Interfacing & Control Systems Computer Networks Biostatistics Biochemistry Principles of Genetics Entrepreneurship for New Ventures	
Interests	
Life Sciences • 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	