BOBBY RANJAN

+65 8265 8737 | bobby002@e.ntu.edu.sg | www.bobbyranjan.com

Education

Nanyang Technological University

MOE Tuition Grant Recipient

B.Eng. in Computer Engineering Minor in Entrepreneurship & Life Sciences CGPA - 4.54/5.00 | 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 Software Skills:

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

Hardware Skills:

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

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

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

Experience

Software Design Engineer Intern | BitTitan

May 2017 – August 2017 | Singapore

- Built customer-facing license consumption report for all BitTitan products
- Conducted tech feasibility analysis to improve BitTitan's reporting capacity
- Built code analysis tool to clean up database references across codebase
- Tech stack includes C#, SQL and Microsoft Roslyn

Technology Analyst Intern | Bank of America, Merrill Lynch

August 2016 - December 2016 | Singapore

- Used message queues to improve efficiency of payment processing system
- Built a proof-of-concept (POC) to help onboard new testers onto platform
- 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 technology solutions startup that aims to help create and manage risk transfer products for developing communities in Asia

- 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: Composite mathematical modelling of calcium signalling behind neuronal cell death in Alzheimer's disease

- Used XPPAUT and MATLAB for modelling
- Paper accepted for publication in BMC Systems Biology
- Presented paper at APBC 2018 (Yokohama, Japan)

Selected Projects

ContextNewsBot | NUS Hack & Roll 2018 | January 2018

- A Chrome extension that provides a diverse set of news articles and objective Wikipedia links for any tweet on your Twitter timeline.
- Won Top 8 prize & Most Socially Useful Hack award at NUS Hack & Roll 2018.
- Uses a Flask server with Twitter and news APIs, and a custom NLP pipeline

Protein Interaction Networks | Final Year Project, NTU | August 2017 - Present

- Applied module detection and clustering algorithms to help researchers identify significant modules in Protein Interaction Networks (PIN).
- Developed Cytoscape plugin using Java; used Python for network analysis.

CommandPlus | NUS Hack & Roll 2017 | January 2017

- A Chrome extension providing hand gesture-based control of one's browser.
- Won People's Choice Award at NUS Hack & Roll 2017.
- Built using OpenCV, WebSockets and JavaScript.

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

- An Android app 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

Top 8 & Most Socially Useful Award | NUS Hack & Roll 2018 | January 2018

People's Choice Award | NUS Hack & Roll 2017 | January 2017

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