BOBBY RANJAN

+65 9647 4046 | bbbranjan@gmail.com | http://www.bobbyranjan.com

Education

Nanyang Technological University
MOE Tuition Grant Recipient
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 (A-level equivalent) | Science Stream
School Topper with 96.8% | May 2014

Skills

Programming Languages:
R • 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

Co-Founder and CTO | PGMed (http://pgmedonline.com/**)**
January 2019 – Present | India/Singapore
PGMed provides home-based post-graduate medical examination training in India

Bioinformatics Specialist | Genome Institute of Singapore
August 2018 – Present | Singapore
- Developing algorithms to identify features in human blood transcriptomes
- Leading a team of post-doc researchers and students

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 aims to help create risk transfer products for developing communities in Asia
- Developed 2 MVP Android applications for different user groups
- 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
- Paper **published in BMC Systems Biology** in April 2018
- 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.

When We Meet Again| NUS Hack & Roll 2015 | January 2015
- An Android app that uses Bluetooth proximity to trigger reminders.
- 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