CHAN JUN SHERN

Telephone Number :	+44 7759187715	Email Address :	chanjunshern@gmail.com
Nationality :	Malaysian	Website :	junshern.github.io
Address :	Room HB63G3, House 63 Evelyn Gardens, London SW7 3BQ, United Kingdom		

Education

2014-Current **Imperial College London**

3rd year Electrical and Electronic Engineering (MEng) student - Predicted 1st Class Honours

Completed module topics:

Mathematics	*Analysis of Circuits*	*Analogue Electronics*	*Digital Electronics*
Software Engineering	*Algorithms & Data Structures*	*Complexity Analysis*	*Computer Architecture*
Communications	*Signals and Linear Systems*	*Control Systems*	*Electromagnetic Fields*
Power Engineering	*Semiconductor Devices*		

2012-2013 **Methodist College Kuala Lumpur**

Did A-Levels in :	Maths	A*	Physics	A*
	Psychology	A*	Economics	B

Massively Open Online Courses (MOOCs)

2016 **Intro to Artificial Intelligence** by Sebastian Thrun and Peter Norvig (Udacity)
Gained understanding of search algorithms and heuristics, Machine Learning algorithms, Bayes networks, Markov Decision Processes, Hidden Markov Models, and Particle Filters & Kalman Filters

2016 **Intro to Computer Vision** by Aaron Bobick (Udacity)
Learned about image processing using convolution kernels, edge detection, Hough transforms, feature detection (Harris detector, SIFT detector), and 3D vision topics (SLAM, SfM)

2015 **Machine Learning** by Andrew Ng (Coursera)
Learned to apply various machine algorithms such as Linear Regression, Logistic Regression, Neural Networks, Support Vector Machines, and k-Means Clustering

2014 **Johns Hopkins Data Science Specialization** by Jeff Leek, Roger D Peng & Brian Caffo (Coursera)
(**Data Scientist's Toolbox, R Programming, Getting & Cleaning Data** - Completed with Distinction)
Gained familiarity with R, learned about data science workflows and best practices

Awards

2014 Maxis Scholarship for Excellence (full scholarship for degree at Imperial College London)
2012 Merit Scholarship (Methodist College Kuala Lumpur)
2011 Outstanding Achievement Award - 10/10 A's in Malaysian national examinations (Wesley Methodist School)

Skills

Programming :	(Fluent in)	C	C++	Python	Matlab	Processing	
		R	HTML	CSS	Javascript		
	(Experience in)	C#	Bash	Java	php	Lua	PostgreSQL
Hardware :	Arduino	Raspberry Pi	Circuit design & analysis				
	PIC	AVR	FPGA & Verilog				
	3D printing	Laser cutting	CAD modelling (SketchUp, Fusion 360)				
IT :	Linux System Administration		Version Control (Git & GitHub)		Game Development (Unity)		
	Graphic Design (Adobe Photoshop, Adobe Illustrator)		Video Editing (Adobe Premiere Pro)				
Languages :	Fluent in English (1st language)		Malay		Mandarin		

Work Experience & Projects

2016 Engineering Lead for Imperial College Tech-Art Installation: Sensorium

- The project was built for display at Imperial College London's annual event Imperial Festival 2016, and consisted of a 5m long, full-body LED mirror where silhouettes of people are displayed on a large (6720 LED's) LED matrix in real time
- Led a team of 8 engineers over the course of 3 months in planning and implementation of a large-scale electronics project, and worked closely with other teams within the project consisting of people from a variety of backgrounds including scientists, design engineers, art installation specialists and fashion designers
- More information about the project online at https://github.com/JunShern/Sensorium

2016 Data Analysis Intern at Maxis Berhad Malaysia (telecommunications company)

- Gained insight into telecommunications industry
- Used R to perform customer analytics tasks, and took initiative to create a web-app using R and R Shiny to streamline a labour-intensive part of the workflow (available online at https://github.com/JunShern/sliced)

2016 Engineering Consultant (Paid freelance contract) for The Tile Project

- The Tile Project is a capacitive touch-based human-computer interface developed by Clarissa Kang as a graduating project at the Royal College of Art, London
- Prototyped electronics on Bare Conductive's Touch Board (Arduino-like microcontroller), and created interactive visuals in Processing to demonstrate how the controls map onto a computer
- Project website: http://www.tileproject.info

2015 Neurospell (Brain-Computer Interface)

- 2nd year Electrical and Electronic Engineering project at Imperial College London
- Worked in a team of 7 members over the course of 6 months to create a low-cost Brain-Computer Interface device to allow motor-impaired people to type on a computer keyboard
- Hardware contribution : Helped to assemble EEG device (consisting of signal capture and amplifier boards from OpenEEG) and analyzed signals from the EEG probes
- Software contribution : Created a program which flashes letters in a grid to stimulate a response in the user's visual cortex, and wrote the interface between the custom UI and our chosen software OpenVibe, which performs digital signal processing and signal classification
- Project website: http://www.ee.ic.ac.uk/jorn.voegtli14/yr2proj/default.html

2015 Pyano (Personal project)

- Wrote a powerful open-source virtual MIDI piano keyboard in Python, which allows users to use QWERTY keyboards as piano (MIDI) keyboards, routable to software synthesizers and other MIDI-compatible programs
- More information (and demo video) available at https://github.com/JunShern/Pyano

Achievements & Responsibilities

2016-2017

Imperial College Energy Society - Webmaster

- In charge of creating a new society website
- Led a rebranding of the society by designing a fresh new logo and online visual identity
- Gained experience in web development, in particular using php and CSS within a Wordpress.org setup
- Website currently hosted at https://www.union.ic.ac.uk/scc/energy/

2015-2016

IC Hack '16 special prize "Best use of Amazon Web Services"

- Hackathon prize winner: Worked in a team to create a web-application which recommends location-based free parking spaces from security camera images

HackScience 2016 1st Runner Up - Automated Fractioning Column

- Hackathon prize winner: Worked in a team to automate common fractioning tasks in chemistry labs, capable of saving many hours of human labour per lab per day
- Project to be developed by team members into a startup to make automated lab equipment widely available

Imperial College Union Game Development Society

- Active member, worked on several games in Unity (plans to release in 2017)