

## Dr David NG (2003 MScEIE)

Dr Ng is currently the Adjunct Assistant Professor in Department of Electrical and Electronic Engineering of The University of Hong Kong. Dr Ng received his PhD degree in Electrical Engineering from HKU, where his engineering talents were duly honed. Dr Ng is a current member of the HK Institution of Engineers, having been granted more than 20 patents in US and China over the years. Dr Ng graduated with an electronic engineering degree from the HKUST, and subsequently completed an MSc degree in electronic & information engineering from the CityU, and had worked in Motorola Semiconductor, Arizona, USA.

As an Entrepreneur and Architectural IC design engineer, with over 20-year impressive work experiences in high-tech industry, Dr Ng founded technology companies focused in Integrated Circuit (IC) design, IoT-Smart Home, Al algorithm for Big Data Mining, and Digital Control, under the funding of multi-national companies and Venture Capitals, after serving in ASTRI (Hong Kong Government Agency), ON Semiconductor (a NASDAQ-listed semiconductors company) & Motorola (an NYSE-listed Telecommunications Company). Dr Ng possesses a track record of raising millions of US dollars from the HK Government and industries to sponsor next-generation IC design technologies. During his years in ASTRI, Dr Ng managed to help one client to go listed in the Hong Kong GEM Board by licensing the IP of Dr Ng's team for production.

With special interests in the fields of both Green Power Management and Sensor, Dr Ng's research areas cover efficient-&-safe LED driver IC, Digital-Protocol Fast-Battery-Charging IC, Energy-Harvesting enabling circuits, low-impedance bandgap reference, etc.

For Sensor areas, Dr Ng's research covers low-noise amplifiers, analog-to-digital, digital-to-analog data converters,  $\mu V$  (10-6 V) bio-signal detection, like brain or heart signals (EEG/ECG), and further Digital Signal Processing (DSP) for the signals, like Fast Fourier transform (FFT).

Over the years, Dr Ng has gained solid experiences of building up R&D teams from scratch to 10-50 engineers, for fast Revenue Returns, by commercializing over 16 product ICs for mass production simultaneously (some even up to Automotive Grade). Dr Ng is currently pursuing a CityU EMBA degree, and is listed in "Beta Gamma Sigma", so as to further sharpen his professional business development skills.

Dr Ng frequently speaks in seminars on IC designs, Brain Sensors, Power Electronics, Fast Battery-Charging and LED driver ICs. He has also published over ten academic papers. In addition, Dr Ng is an Adjunct Assistant Professor and Honorary Lecturer in

HKU and other tertiary institutions, teaching a wide range of engineering courses, including master-level ones, and supervising Master students for their Dissertations, for over 16 years.