BEng in Computer Science

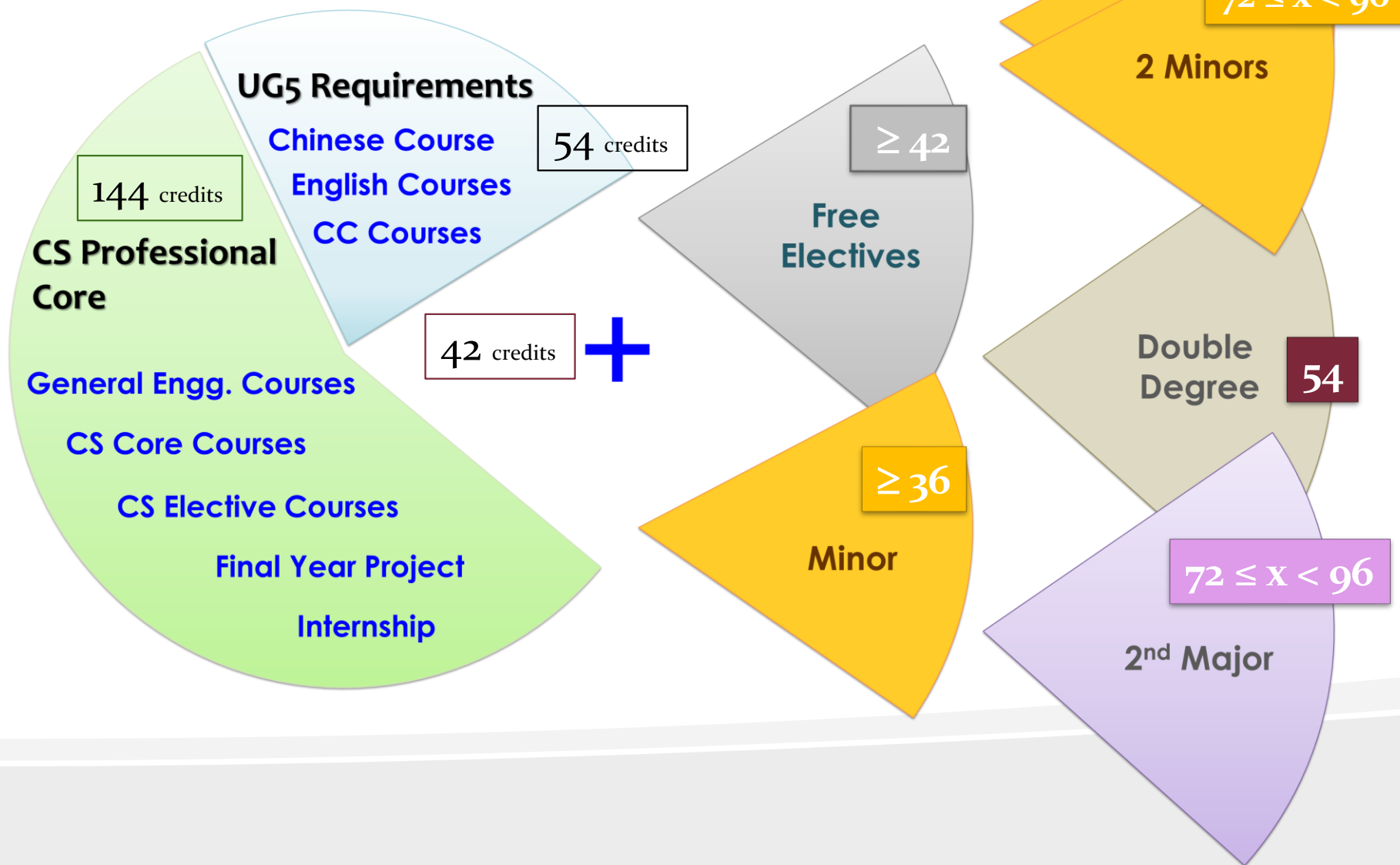Dr. Anthony Tam
Academic Advisor

What is Computer Science?

Computer science is not just about programming and studying the computers, but rather it is about **problem solving** – *the study of algorithms and information representation to solve real-life problems.*

"Almost every major challenge facing our world is *turning to computing for a solution*, from conquering disease to eliminating hunger, from improving education to protecting the environment." by Prof. Eric Roberts of Stanford University, the co-Chair of ACM's Education Board at 2007

Programme Structure

UG5 Requirements
- Chinese Course
- English Courses
- CC Courses

54 credits

144 credits

CS Professional Core
- General Engg. Courses
- CS Core Courses
- CS Elective Courses
- Final Year Project
- Internship

42 credits **+**

Free Electives ≥ 42

Minor ≥ 36

2 Minors $72 \leq x < 96$

Double Degree 54

2nd Major $72 \leq x < 96$

Flexibility

BEng(CompSc)

BEng(CompSc) + minor

BEng(CompSc) + 2 minors

BEng(CompSc) + BBA

BEng(CompSc) + 2nd major

Minors & 2nd majors

Minor

- Any minor **except**
  - Minor in CS

2nd Major

- Any major **except**
  - Major in CS
  - Major with a total loading of 96 credits
    - E.g., Science Majors

Check this out: Academic Advising Office (http://aao.hku.hk/)

Computer Science Focus Areas

Theoretical Computer Science

Compiler, Functional programming, Quantum computing, Game theory, Cryptography

AI & Robotics

A.I. Machine learning, Applied deep learning, Computer vision, Robotics

Big Data Analytics

Statistical learning, Adv DB, Data Mining, Bioiformatics
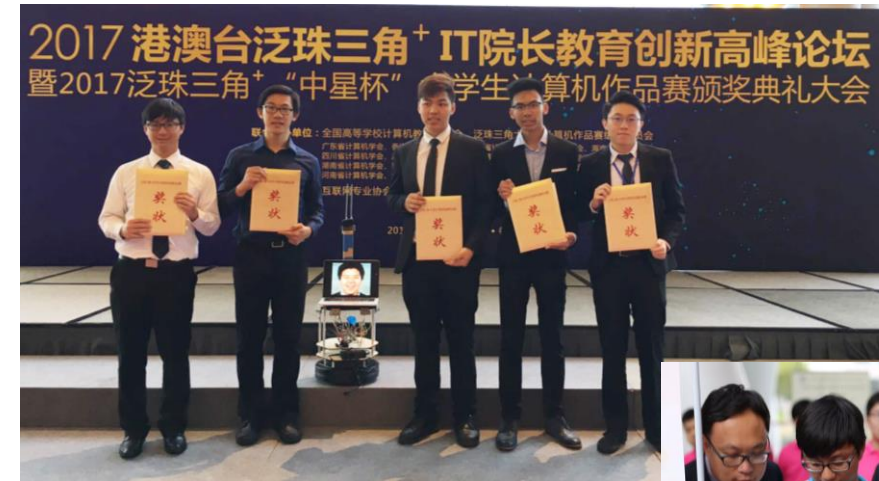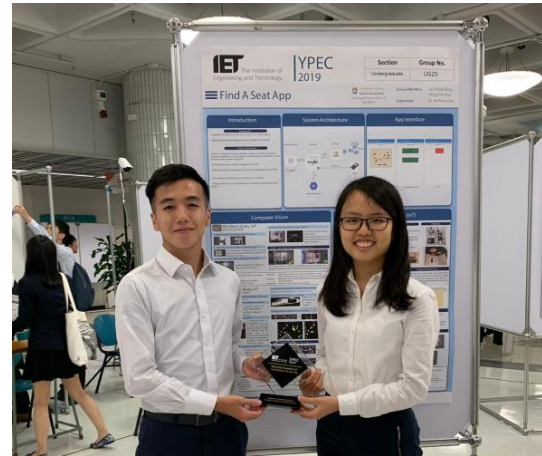
Financial Computing

Cyber security, Blockchain, Crypto-currency, E-payment, ECommerce

Systems & Networking

Computer architecture, Web technologies, Mobile app design, Distributed computing, Scientific computing

Final Year Projects

- Research and development projects
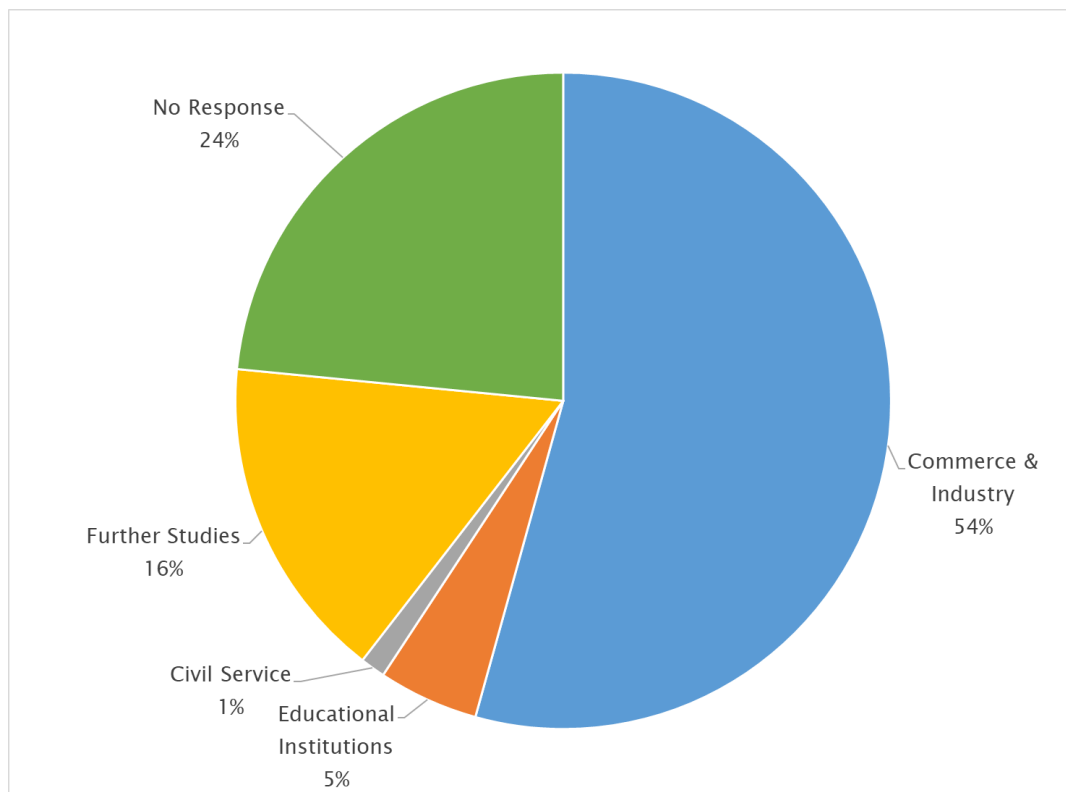
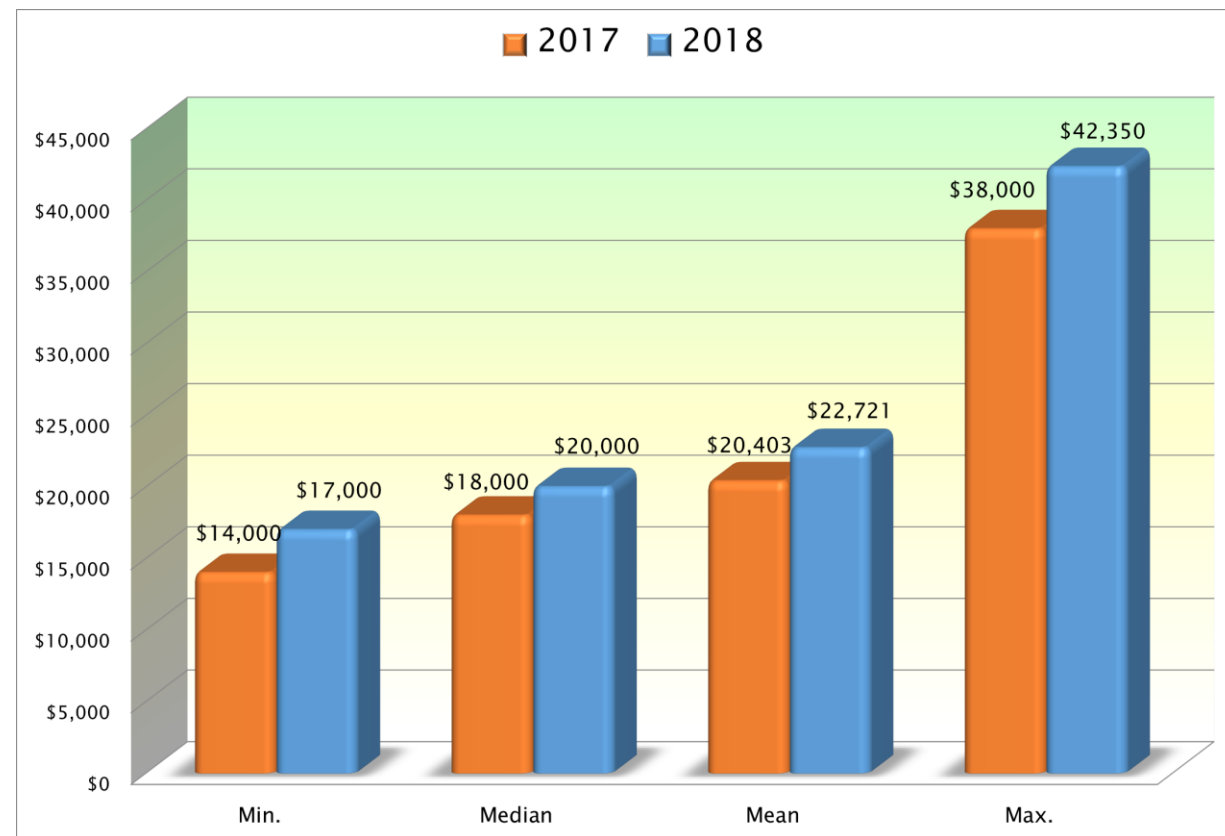- Industrial / community based projects

Internship

Career – 2018 Graduate Statistics

Where did our 2018 graduates go?

Basic Salary of HKUCS Graduates

Career – Graduate Statistics

Positions

	IT-related positions	Others
2018	85%	15%
2017	100%	
Examples	Business/System/Technical/Technology Analyst Consultant/Application Consultant IT Officer/Specialist/Technician Programmer/Developer/Software Engineer IT/Cloud/System Engineer Android/Game/Mobile App Developer Research Assistant Web Developer Quantitative Researcher	Graduate Trainee Program Coordinator Flight Attendant Financial Consultant

Career – Graduate Statistics

Companies

	IT/Tech/Engg	Finance/Banking	Others
2018	58%	23%	19%
2017	66%	14%	20%
Examples	Accenture Alibaba ASM Pacific Technology Ltd ASTRI China Mobile Huawei HACTL IBM China/Hong Kong Intel Jardine OneSolution NetEase, Inc. PCCW Solutions Transaction Technologies	Bank of America Merrill Lynch BNP Paribas Credit Suisse Group AG Deloitte Touche Tohmatsu Goldman Sachs (Asia) LLC KPMG Manulife Financial Morgan Stanley UBS AG	HK Education City Ltd South China Morning Post Joyce Boutique Holdings Ltd Cathay Pacific Airways Limited OGCIO HKU

Career – Useful References

- ACM Careers in Computing Website
  - http://computingcareers.acm.org/

- Target Jobs – IT and Technology
  - Specialisms:
    - https://targetjobs.co.uk/career-sectors/it-and-technology/advice/specialisms
  - Ten typical jobs graduates can do in IT:
    - https://targetjobs.co.uk/career-sectors/it-and-technology/advice/286189-ten-typical-jobs-graduates-can-do-in-it

Further information

- Academic Advisor of Computer Science department:
  Dr. Anthony Tam (atctam@cs.hku.hk).

- Computer Science program: http://www.cs.hku.hk/programme/

- To download this briefing note and study plans:
  https://www.cs.hku.hk/programmes/beng-compsc/academic-advising

- Or access this web page via the QR code