

Supporting Evidence Pack

THE Awards Asia 2027 – Most Innovative Teacher of the Year

Dr Aquil Mirza Mohammed, *Senior Lecturer, The Hong Kong Polytechnic University*

1. Teaching Innovation: Visible-to-Impact Pedagogy

Dr Mohammed's teaching innovation transforms diverse computing classrooms by making reasoning visible, adapting support to learner needs, and converting coursework into research, innovation and societal contribution.

Stage	Classroom Practice	Student Outcome
Cognitive Visibility	Line-by-line code tracing, flowcharts, live coding with intentional errors	Students understand logic rather than memorising syntax
Translational Explanation	Discipline-specific analogies from engineering, design, biology, construction, health and business	Non-computing students see computing as relevant and accessible
Adaptive Support	Low-stakes quizzes, scaffolded labs, guided code frameworks, consultation and feedback	Students build confidence, resilience and independent problem-solving
Output Conversion	Mentoring coursework into papers, competitions, prototypes, patents and start-up pathways	Students become authors, innovators and contributors

2. Impact at a Glance

Indicator	Evidence
Students reached since joining PolyU	2,000+ across computing and interdisciplinary subjects
Largest course cohorts	300+ students in Programming Fundamentals and Applications
Courses taught	Programming Fundamentals, Operating Systems, Computer Networking, AIoT
Disciplines reached	Computing, engineering, fashion, design, physics, linguistics, biology, building sciences and data science
Student feedback	eSFQ 4.6–4.8/5
Student progression	Reported withdrawal reduced to 0% and pass rate improved to 100% in the evaluated course context
Student outputs since 2025	40+ conference papers, 10+ external awards, 10+ startup finalist teams, 5+ patent/startup initiatives
Recent recognition	PolyU Early Career Teaching Faculty Award; UGC Teaching Award University Nominee; Teaching Excellence Award

Independent recognition: This model underpins Dr Mohammed's PolyU UGC Teaching Award nomination and QS Reimagine Education 2026 "Visible-to-Impact Learning" submission.



3. Evidence of Impact During the Past 12 Months

3.1 Teaching recognition and professional development

Year	Evidence	Relevance
2026	University Nominee, UGC Teaching Award – Early Career Faculty Sector	Institutional validation of teaching excellence
2026	Teaching Excellence Award, IHERD & IETI	External recognition of teaching quality
2026	Certificate in Service-Learning Pedagogy and Practice, PolyU SLLO	Development in student-centred and community-engaged learning
2026	eLearning Forum Asia Award Nomination / Poster Presentation	Dissemination of pedagogical and digital innovation
2025	Early Career Teaching Faculty Award for Outstanding Achievement, PolyU	Recognition of outstanding early-career teaching
2025	Teaching Grant, Faculty of Computing and Mathematical Sciences, PolyU	Institutional support for learning and teaching innovation

3.2 Student achievement and output conversion

Year	Student / Project Outcome	Evidence of Teaching Impact
2026	COMP Best Project Award Competition	Two mentees secured InfoTech Job Market Driven Scholarship, Excellent Presentation Award and Top 10 shortlist from 200+ projects
2026	1st Place / Outstanding Grand Award, CTM Macau AI + Big Data Competition	Student innovation succeeded externally among approximately 800 teams
2026	Best Paper Award, IEEE ICCSP, India	Student work converted into recognised scholarship
2026	Best Paper Award, Springer ICWSNUCA, India	Interdisciplinary AIoT work achieved international recognition
2026	PolyU Micro-Fund and FCMS Ideation Funding winners	Student projects progressed toward entrepreneurial pathways
2025	Best Student Paper Award, IEEE ICNSC, Finland	Mentored student research achieved international recognition
2025	2nd Place, OLVI-Säätiö Neuro Challenge, Finland	Student-led interdisciplinary innovation received external validation
2025	Best Paper and Best Poster, IEEE ICAIRCA, China	Evidence of high-quality mentored student research dissemination

3.3 Educational technology and scalable innovation

Innovation	Evidence	Why it matters
Adaptive Computerized Testing	PCT/CN2026/085825	Supports personalised, scalable assessment
Arona Adaptive Assessment Engine	QS Reimagine Education 2026; eLFA Symposium 2026, ICCSP paper	Adapts challenge based on verified learner performance
HCR 3D Learning Simulator	QS Reimagine Education 2026, IP 2026	Connects programming to safe 3D robotic behaviour
AIoT Learning Platforms	Projects in construction safety, healthcare, PPE monitoring and robotics	Converts abstract computing into applied problem-solving

4. Evidence from Students and Academic Leaders

4.1 Mandatory Student Testimonies

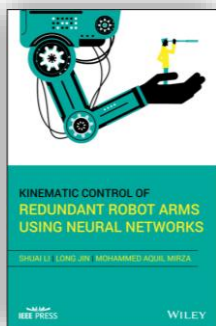
- a) **CHAN Ho Tsun, Year 2, Civil Engineering:** “Tracing Python loops line by line on paper forced me to see where variables actually change, not just guess. His labs were low-pressure but firm on fundamentals.”
- b) **WU Yuxuan, Year 1, Data Science:** “His slides used graphs, analogies and examples that enhanced learning. Most impressive was the passion and positive attitude he brought to every class.”
- c) **GUAN Fuyin, Year 1, Applied Mathematics:** “He understood our learning stage. By giving a main code framework, he helped us focus on understanding, analysing and modifying key sections.”
- d) **RUAN Haozhe, Year 2, Applied Physics:** “He encouraged us to build projects around our own interests and supported strong projects toward conferences and book chapters.”
- e) **YANG Kam Yung, Year 2, Fashion and Textiles:** “He actively seeks feedback, experiments with new activities and refines lectures based on what works best for students.”

4.2 Academic and Professional Endorsement

- a) **Prof. Qing Li, Head of Department (COMP), Institutional Nomination for 2026 UGC Teaching Award:** Dr Mohammed has transformed the teaching of computing from content transmission into a strategic system for output conversion and student agency.
- b) **Prof. Man Yiu Ken, Teaching and Learning Head, Institutional Nomination for 2026 UGC Teaching Award:** His pedagogical approach strengthens students’ cognitive reasoning, embraces learner diversity, builds resilience against learning failure and transforms learning into tangible impact.
- c) **Angelo A. Jimenez, President, University of the Philippines (External Testimony):** Dr Mohammed’s service-learning engagement was commended for clarity, inclusiveness, accessibility and confidence-building through structured learning.
- d) **Dr. Wai Hon-Wah, Director, PolyU Industrial Centre endorsement:** Dr Mohammed’s mentorship was recognised for supporting diverse learners through patient instruction, practical demonstrations and hands-on experimentation.

4.3 Cross-disciplinary Significance and Teaching-Related Scholarly Outputs

The testimonials show a consistent pattern across disciplines: students gain confidence, understand reasoning, connect computing to their own fields and convert learning into authentic outputs. The selected book covers below show dissemination of teaching-related scholarship and student mentorship outputs across robotics, AIoT, operating systems and interdisciplinary computing education.



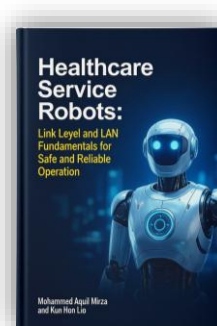
Dec 2019



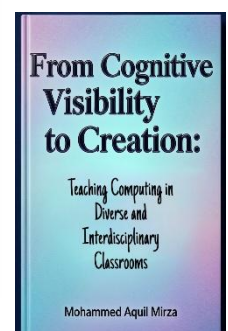
Mar 2026



In Press



May 2026



June 2026

5. From Classroom to Impact: Visual Evidence and Scalability

5.1 Visual Evidence



- Captions:** 1. *Student research recognition: IEEE ASCC 2026 Hong Kong – Best Application Paper Award.*
 2. *Course-to-conference pathway: Young Investigator Finalist recognition, World Congress on Sports.*
 3. *JRMP (Secondary School Students): Cloud Computing and Robotics learning activity (40+ lectures).*
 4. *Student project workshops: AIoT, Intelligence and Robotics (AIR) Lab, PolyU, Hong Kong*
 5. *Teaching and mentorship recognition: Memento of Appreciation from Dr Wai Hon-Wah, Director, PolyU Industrial Centre, PolyU, Hong Kong.*
 6. *Community-engaged education recognition: Memento of Appreciation from the President of IMA, HK*

5.2 Transferability beyond one course

Transferable principle	How it can be reused
Cognitive visibility	Applicable to computing, engineering, design, health sciences and data-intensive disciplines
Translational explanation	Helps diverse learners connect abstract concepts to disciplinary language
Adaptive support	Supports large classes with varied prior preparation
Output conversion	Converts assignments into research, competitions, prototypes, patents and community-facing innovations
Evidence-informed refinement	Uses feedback, performance data and student outputs to improve teaching continuously

Overall impact – Dr Mohammed’s model shows that large, diverse technical classes can be inclusive without lowering standards. By making reasoning visible, adapting support and mentoring students toward real-world outputs, his teaching enables learners to move from anxiety to confidence, from coursework to contribution, and from disciplinary boundaries to interdisciplinary innovation.