IDEPARTMENT OF MATHEMATICS

The 14th Epsilon Fund Award to Top Students

The Epsilon Fund Award was established in 2006 with donations from faculty and staff of the Department of Mathematics, and from the departmental fund to honor excellent students: undergraduates and postgraduates who excel in mathematical scholarship and research. Ninety-eight students have been awarded since its establishment, and the Department is pleased to announce that this year twelve students receive the award and two students obtain honorable mention. Each of them possesses a very high cumulative grade average, especially in mathematics subjects, and some have received multiple graduate program offers from famous universities.

Twelve Mathematics students receive the Epsilon Fund Award

Three postgraduates:

1. Zhiqiang CAO 曹 志 强 (Year 4; PhD) 四年級哲學博士(數學) 研究生

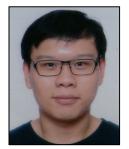
Zhiqiang is now our year-four Ph.D. student whose research supervisor is Professor Man Yu WONG. He is the recipient of the Din-Yu Hsieh Teaching Award of 2016 and the Best Oral Presentation Award in the 19th International Conference on Statistics and Analysis, Singapore, 2017 due to his good teaching and research work. He is also recommended by School of Science to receive the George K. Lee Foundation Scholarships this semester. Together with his supervisors, he has published three papers in referred journals on modeling of medical data and



one conference paper on building up functional-coefficient autoregressive and linear regression model. He also worked with his former master supervisor Dr. Hui LI of Beijing Normal University and Prof. Guosheng YIN of University of Hong Kong on applying the varying-coefficient model to handle survival data with right-censored through a two stage estimation procedure and a paper was published in The Canadian Journal of Statistics in 2018. Zhiqiang has already been offered a research engineer post in Huawei focusing on mathematical modelling and algorithm analysis.

2. Hugo Wai Leung MAK 麥 偉 樑 (Year 3; PhD) 三年級哲學博士(數學) 研究生

Hugo is currently pursuing our Ph.D. program in his year-four study under the supervision of Professor Jimmy Chi-Hung FUNG. Apart from gaining A+ in almost all courses, he also demonstrated superb teaching and research abilities throughout all years. He received the School of Science Postgraduate Research Excellence Award 2018-19, the HKUST Research Travel Grant Award and the Din-Yu Hsieh Teaching Award for several times since 2016, as well as the



Global Young Scientists Summit 2017 Top 10 Poster Award. He has completed numerous high quality journal and conference publications in numerical modeling, remote sensing and inverse retrieval of pollutants through satellite means. He has also delivered talks in renowned international conferences in imaging, data science and atmospheric meteorology. Professor Fung compliments Hugo on his independence of mind, bravery in solving challenging and open research problems, high motivation to conduct high impact research and educate next generation, as well as his capability of applying varieties of mathematics knowledge in solving real-life problems. "I foresee that in long run, Hugo will definitely infuse new impetus in technological breakthroughs, as well as improving quality of human lives", remarked by Professor Fung. Hugo has collaborated with different research groups from UC Berkeley and National Institute of Meteorological Research for ongoing journal publications. He will stay in academia upon graduation.

3. Lian ZHANG 张 炼

(Year 4; PhD) 四年級哲學博士(數學)研究生

As a research student of Professor Mo MU, Lian is now pursuing his fourth-year Ph.D. study. Professor Mu speaks highly of Lian, "In the past four years, Lian has been making impressive progress on fluid-structure interaction (FSI) research in algorithms design, analysis and implementation and made important contributions to the field of FSI. Some of the results have been submitted to peer review journals. Due to his excellent research work, he has been invited to give talks in top institutes and conferences". Lian has been offered as a postdoctoral scholar



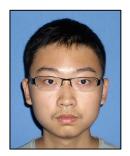
in Department of Mathematics, Penn State University, USA. He would continue his research in the field of scientific computing, especially FSI problems and some other multi-physics problems. "It is important to not only stay focused on one project/topic, but also enlarge the scope of knowledge by discussing with others and reading papers," advised by Lian for tips to achieve research excellence.

Eight undergraduates:

4. Mucong DING 丁 牧 聪

(Year 4; CS) 四年級理學士(數學) - 計算機科學本科生

Mucong is currently our fourth-year student pursuing the Bachelor of Science (Mathematics) Degree in Computer Science Track, and also taking Computer Science as the second major. He performs incredibly fabulous by achieving a cumulative grade average over point 4.0 for consecutive six semesters. Impressed by his academic results, the University has bestowed the Dean's List Award and University Scholarship on Mucong. He also receives the HKSAR Government Scholarship Fund–Reaching Out Award. Mucong is fond of research work. He won



the First Runner-Up Award of Mr. Armin and Mrs. Lillian Kitchell Undergraduate Research Award in 2017. He will continue study after graduation and has got acceptance from University of Maryland, University of Southern California and University of Texas. Among all offers, he chooses Ph.D. in Computer Science at University of Maryland.

5. Do Kien HOANG

(Year 4; PMA) 四年級理學士(數學) - 純粹數學高級班本科生

Kien was the 12th Epsilon Fund Awardee before. He is now our final year student pursuing the Bachelor of Science (Mathematics) Degree in the Pure Mathematics Advanced Track. Kien started to enroll postgraduate level mathematics courses in his third-year of study and up till now he has already completed eight of them with all grade A/A+. Kien was granted the Dean's List Award, Chern Class Talent Scholarship and University Scholarship for academic excellence. He also got the School of Science Exchange Scholarship with which he went for study exchange at University of Waterloo. Kien shares his motto: "Maths is hard, and we should be persistent." He



thinks hardship and struggle are inevitable when learning new knowledge, but understanding the challenging problems by capturing the essence will be rewarding. Kien will pursue Ph.D. study at Yale University. He also gets offer from University of Wisconsin–Madison, Rutgers University, The Ohio State University and University of Waterloo.

6. Qinwen ZHAI 翟 沁 雯

(Year 4; MAEC) 四年級理學士(數學與經濟學)本科生

Qinwen is now pursuing her final-year study in the program of Bachelor of Sciences Degree in Mathematics and Economics, as well as a minor program in Information Technology. She is outstanding academically and receives several awards and scholarships including the Dean's List Award, Chern Class Scholarship, The Cheng Foundation Scholarship for Chinese Mainland Undergraduate Students, University's Scholarship and also the HKSAR Government Scholarship



Fund–Reaching Out Award. Qinwen joined an exchange program at Columbia University in 2018. Having a strong determination and clear direction towards her future path, Qinwen chooses to pursue the Master program in Computational Finance at Carnegie Mellon University. She also receives offers from New York University, Columbia University and Maryland University.

7. Sheng ZHOU 周 晟

(Year 4: PMA) 四年級理學士(數學) - 純粹數學高級班本科生

Sheng is in his final year pursuing the Bachelor of Science (Mathematics) Degree in Pure Mathematics (Advanced) Track, and also studying another major program in Computer Science. With outstanding academic results, Sheng is presented with the Dean's List Award, University Scholarship, HKSAR Government Scholarship and also Chern Class Talent Scholarship. Sheng has joined the exchange program in Swiss Federal Institute of Technology Zurich and is awarded High Fashion charitable Foundation Exchange Scholarship and Overseas Learning Experience

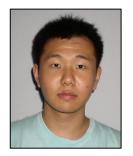


Scholarship. He is enthusiastic in taking challenges. He not only joins HKUST MATH Competition, but also participates in ACM International Collegiate Programming Contest in different regions and gets marvellous results. In 2018, Sheng competed in the student teams of Helvetic Coding Contest, which was Switzerland's biggest programming contest, and won the Second Runner-Up Award. In the same year, he also took part in Google Coding Jam and got into the Top 1000 among the worldwide contestants.

8. Kam Cheong AU區 錦 昌

(Year 3; IRE) 三年級理學士 (數學) - 國際科研本科生

Kam Cheong is an outstanding student in the elite IRE (International Research Enrichment) program majoring in Mathematics (PMA track). Achieving academic excellence, Kam Cheong was presented with the Dean's List Award, HSBC Hong Kong Scholarship, The C I Stapleton Scholarship and the Chern Class Scholarship during his study at HKUST. Professor Maosheng XIONG has been the advisor for Kam Cheong's self-study of algebraic number theory for two semesters. He is profoundly impressed by Kam Cheong's self-initiation and eagerness to learn.



"Kam Cheong stands out among his fellow students: he studies diligently, he has his own inner drive and determination, and he is quite able in mathematics," commented by Professor Xiong. Kam Cheong believes that an adroit manipulation of concepts is essential when studying mathematics. He opines that being diligence is paramount, and apart from investing time, it is important for one to be able to digest and integrate different concepts in mathematics.

9. Jingbo WAN 万静波

(Year 3; IRE) 三年級理學士 (數學) - 國際科研本科生

Jingbo is an excellent student in the program of IRE (International Research Enrichment) majoring in Mathematics (PMA track). He has obtained all grades A/A+ among 20 mathematics courses he has taken before, and four of which are of postgraduate level. Jingbo performs so outstanding academically that he receives various scholarships and awards including the Dean's List Award, Chern Class Talent Scholarship and University Scholarship. Apart from coursework, Jingbo is superbly good at doing research. He has just won the First Runner-Up Award of 2019



Mr. Armin and Mrs. Lillian Kitchell Undergraduate Research Award for his research project on geometric flows under the supervision by Professor Frederick FONG. A preprint has been submitted to a reputable pure mathematics journal. Professor Fong said, "Jingbo is a very fast learner...I have assigned him to read a technical paper on the Ricci flow in Year 1 summer, and he could present eloquently the fine detail of the paper after reading it just for a couple of months." In the coming summer and fall, Jingbo will visit Columbia University to learn and discuss research with world's top experts on Differential Geometry and General Relativity there.

10. Xiaoyan ZHUANG庄 晓 彦 h

(Year 3; MAEC) 三年級理學士(數學與經濟學) 本科生

Xiaoyan is in her third year of study in the program of Bachelor of Sciences Degree in Mathematics and Economics. She receives the Dean's List award every semester and the University Scholarship due to her excellent academic attainment. Among the nine mathematics courses that Xiaoyan has got almost all grade A/A+, she enjoys studying MATH 3033 Real Analysis the most because she likes the way of reasoning in the course. She believes that understanding the intuition behind the varied mathematics words, such as notations, lemma and

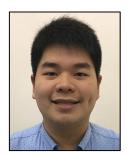


theorems, is of utmost importance for one's undergraduate study. It helps a lot when one transits to graduate study and is also a applicable technique in workplace. Her learning initiative impresses Professor Zhigang BAO a lot as she always gives constant feedback to enhance teaching-and-learning outcome. Besides studying hard, Xiaoyan is also actively involved in extra-curricular activities by attending the Chinese Folk Art Society of HKUST. Xiaoyan is currently taking the exchange program at Columbia University in the City of New York.

11. Clyde Wesley Si ANG

(Year 2; DSCT) 二年級理學士(數據科學與技術)本科生

Clyde is our year-two student pursuing the Bachelor of Science Degree in Data Science and Technology. He has achieved grades A+ for all the taken mathematics courses, and has even got a full term grade average point 4.30 in last fall semester. Among the attempted mathematics courses, Clyde enjoys MATH 2043 Honors Mathematical Analysis the most as he likes solving those interesting problems in the course with logical solutions. He believes a comprehensive understanding of the topics from the basic to complicated concepts is crucial for one to strive for



academic excellence. Professor Min YAN, who has taught Clyde him several mathematics courses, speaks highly of Clyde for his proactive learning attitude as he often emails Professor Yan problems and suggestions about the course. Clyde has been presented with the Dean's List Award, Chern Class Scholarship and University Scholarship because of his outstanding academic performance. Apart from internal awards, Clyde manages to obtain various external awards, such as being the frequent medalist of International Mathematical Olympiad. He also joins his team and wins the Regional Champion for Hong Kong Underwater Robot Challenge 2019.

12. Jeff York YE 葉 正 夫

(Year 2; IRE) 二年級理學士 (數學) - 國際科研本科生

Although Jeff is only a year-two student pursuing IRE (International Research Enrichment) program majoring in Mathematics (PMA track), he has already completed four postgraduate level mathematics courses and attained all grades A/A+. He is convinced that by learning in advance, such as auditing classes and studying advanced textbooks, he can equip him with better techniques and intuition in mathematics. Professor Ivan IP, the course instructor of MATH 5111 Advance Algebra, greatly praises Jeff for his capability to finish the challenging, difficult take-



home exams and score the top among the fellow postgraduate students. Jeff is so brilliant in mathematics that he has recently won the Champion in the senior group of the 7th HKUST MATH Competition. Jeff will undertake a research project under Professor Ip's supervision to study topics in cluster algebra which requires various advanced mathematical knowledge in algebraic geometry, Lie theory and representation theory, where he can give full play to his vast mathematical proficiency.

Two Mathematics students receive Honorable Mention

1. Zizheng LIN 林 子 铮 (UG Year 4; CS) left photo

2. The Hoan NGUYEN

(UG Year 2; PMA) right photo



