

TOGETHER

WE CREAT



# **Invitation to offer internships and** graduate employment opportunities

- Bachelor of Science (Honours) in Investment Science and Finance Analytics
- Bachelor of Science (Honours) in Data Science and Analytics
- Master of Science in Applied Mathematics for Science and Technology (Specialisms: 1. Decision Science 2. Actuarial and Investment Science)
- Master of Science in Operational Research & Risk Analysis
- Master of Science in Data Science and Analytics





**PolyU's Department of Applied Mathematics offers** effective ways and channels to facilitate your recruitment of summer interns, staff for permanent, temporary or part-time positions.

Our Department's academic programmes are designed to produce graduates with professional knowledge and skills in mathematics and statistics, finance and investment science, data analysis, and operational research relevant to decision making and practical problem solving in different industries.

### **Academic Programmes**

Bachelor of Science (Honours) in **Investment Science and Finance Analytics** 

Bachelor of Science (Honours) in **Data Science and Analytics** 

**Applied Mathematics for** 

Science and Technology

2. Actuarial and Investment Science

and pharmaceuticals.

Graduates from the Decision Science Specialism possess theoretical and practical knowledge in statistics, operations research and scientific computing, which lay a solid foundation as professionals in engineering, finance and management.

Graduates from the Actuarial and Investment Science Specialism possess solid foundation of actuarial and investment science, which allow them to become leading professionals in these areas.

Master of Science in **Operational Research and Risk Analysis** 

Master of Science in **Data Science and** Analytics

Master of Science in

1. Decision Science

**Specialisms:** 

### We train graduates with...

Strong mathematical and statistical skills and the abilities in quantitative analysis and critical thinking which support graduates to pursue careers in investment banking, fund management, data analytics, risk management or financial product development and pricing.

Expertise that cuts across core disciplines of mathematics, statistics and computer science, which enables them to pursue a variety of careers such as finance, telecoms, information technology, market research, manufacturing

Strong operational research, risk analysis and statistical skills and a thorough understanding of their applications in the world of modern operational research and risk analysis, which help them pursue careers in the fast moving world of business, commerce, finance and insurance.

Modern data science skills that cuts across core disciplines of mathematics, statistics and computer science, analytical and critical thinking, as well as problem-solving skills, which will enable them to pursue careers as data analysts in a broad range of industries e.g. finance, IT, telecommunication

# NURTURE YOUNG TALENT AT WORK

### **Student Internship Programme**

To prepare students with professional competence, the ability of independent thinking, effective communication skills and a global outlook, our students of *BSc (Hons) in Investment Science and Finance Analytics,* and *BSc (Hons) in Data Science and Analytics* are required to take placement or internship that are related to their academic studies (i.e. investment and finance, data analysis, IT, market research and business intelligence, etc.).

Depending on their study mode and workload, students could complete the internship during summer break, or take up part-time assignments of at least 120 hours.

### PolyU's Graduates are ready to contribute to your team success

The Hong Kong Polytechnic University is committed to offering high quality education with a strong focus on application-based nature, aiming to groom future leaders with professional knowledge to meet different needs of the society. Our graduates are well prepared to meet the challenges of future careers.

## **Platform to Recruit Top Talent on Campus**

In PolyU, we are dedicated to groom high calibre graduates. You are most welcome to contact us for:

### On-campus Recruitment

Through on-campus recruitment talks, you can interact with our students and introduce the details of your recruitment needs directly.

### Student Internship Programme

Partner with us to offer internship opportunities in which students could apply classroom learning to a real work environment. You can also identify potential new staff and help nurture young talents in a cost and time-effective manner.

### Free Job Posting

Job posting via PolyU's intranet helps reaching our fresh graduates/ your target candidates who possess the necessary professional knowledge and skills suit your business' needs.

### **Our Supports**

- Free Job Posting
- Screening and Shortlisting of Candidates
- Mediation and Consultation to both Students and Partner Placement Organizations

### **Your Benefits**

- Gain publicity as a socially caring and responsible firm in the tertiary education sector;
- Identify high calibre candidates with a passion to develop a career in investment/market research/financial industry;
- Bring in fresh and creative ideas and skills by our students;
- Enjoy a cost-effective intern/ trainee recruitment.

Whether you require on-campus recruitment, or simply want to publicize your part-time/internship/job opportunities, we are ready to work closely with you and help custom a recruitment strategy.





 Simply send an email with your job descriptions/requirements to eunice.hung@polyu.edu.hk, or
Call us direct at 3400 3908



### **OFFSHORE INTERNSHIP**

Alex Wong Sport Statistics Scientist and Marketing Intern at NBN23, Spain

worked as a Sport Statistics Scientist and Marketing Intern in a

Spanish data company that generates value by transforming big data into smart data for sports. During the internship, I assisted the marketing team to translate promotion material from English or Spanish to Chinese, and developed statistic algorithms for determining interesting patterns from large datasets. It was an unforgettable and inspiring experience to me as I saw more career possibilities in different areas and enhanced my data analytics knowledge. This internship is undoubtedly beneficial to my future career."

**Evan Zhuang** Intern at Bean Partners, United Kinadom

"My greatest accomplishment during this internship is that I built a comprehensive database consists of more than 30,000 worldwide investors' information that I extracted with python and NLTK

(Natural Language Tool Kit). This is my latest breakthrough in statistical learning. The idea was inspired by a boring investors searching process through LinkedIn and other platforms. I porposed to my supervisor to develop a programme for extracting the required information from Internet. My suggestion was adopted and I spent 2 weeks to set up the project from scratch. I am excited to apply what I have learnt in the classroom and improve the workflow. It enhances my confidence on embarking on future career."

# 政府統計處 普查及人口統計科

### Yanna Cheung Intern at Census and Statistics Department, HKSAR

"My internship in the Census and Statistics Department was a valuable experience for me to get myself prepared for the future career. Working as a research intern, I was assigned to conduct a comparison report, which was related to the census questionnaire of Hong Kong and other countries such as United Kingdom, Canada and Singapore. To complete the tasks, I had to apply the statistics and economics knowledge that I learnt from my study. My supervisor, an experienced statistician, always shared with me his working experience and gave me a lot of inspiration. Such practical work experience helps me set a clear goal for my future career."

### Sylar Tsui

Data Analyst Intern at Burger King, Russia

"During my internship at Burger King in Russia, I was assigned to find out the best gross margin of a restaurant in a particular period by using mathematical method and statistical software. Without

experience in handling a large amount of fussy data in a real work setting, I finished the task by using K-means clustering and achieved a very effective performance as commented by my employer. This internship not only enabled me to discover my potential and interest in finance and investment, but also gave me confidence in developing my career in this industry after my graduation."

The focus of my internship was, firstly, on efficiency enhancement and optimization of the simulation model; and secondly, on simulations and analysis of the model. After the simulation, interns may have an opportunity to write a scientific paper for their work if a new result or technique is found. Through this internship, I gained practical knowledge and skills, which are extremely important to my study and future career development. More importantly, my work has granted me an opportunity to publish a scientific paper! This internship experience has totally changed my perception towards research work: it could be interesting and challenging. This internship has inspired me to pursue further study in Germany."

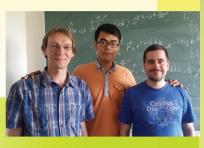


# **STUDENT STORIES**

"By the end of the internship, I successfully compiled a 45-page report to record the ideas, implementations and results from the machine learning project and all other experiments conducted. At the time of my leaving, I delivered sincere appreciation to my supervisors, Prof. Dr. Daniel Potts and Dr. Toni Volkmer, for their kind guidance and patience. The internship is to be a remarkable point in my life. It not only gives me hands-on technical working experience, but also an inspiration of problem solving methodology and a pre-sight of my future career path."

Coulson Li

Trainee at TU Chemnitz, Germany





background of options and futures products in the financial industry. I am glad that both my hard and soft skills have been enriched during this 8-week internship. I have decided to develop my career in the banking industry after my graduation."

Man Kuen Lam Intern (Investment Banking Division) at China Merchants Bank, Shanghai

"Through this internship, I learned many new skill sets when I dealt with various practical projects. During my internship, I was assigned to handle a project which required a lot of statistical support. It was a great challenge for me yet I finally did it! Due to my satisfactory performance, the manager allowed me to join many meetings and talks that involved different levels of officers and directors. It enhanced my interpersonal skills that are definitely useful to my future career and aroused my interests in the fields of asset management as well as merge and acquisition.





Ken Cheung

Internship at MVA

### Tony Leung Intern at Sun Hung Kai Real

"During the internship, I have learned how to generate accurate statistical data and prepare the post-event reports. Although I have equipped with statistical skills in current my study, it is not that easy as I thought when I was assigned to prepare a formal statistical report in a real work setting. Thanks for the guidance from my supervisor, both my report writing and presentation skills have been improved a lot. It's really a fruitful experience for me to work as an intern in this company.

# Estate Agency Ltd



### "During my internship at MVA Hong Kong Ltd, I was well trained in manipulating and analyzing survey data by using the statistical software. I also have a deeper understanding of the work of research consultants. It was really a valuable experience as I could transfer the classroom knowledge to the world of practice. I would like to thanks my supervisor and colleagues as they always provided guidance and shared with me their practical experience at workplace. I will make use of this fruitful internship experience to plan for my future career."

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# LOCAL INTERNSHIP



Sheena Shi Internship at KPMG

"I worked as a trainee at KPMG, which was really a memorable experience to me. Not only did I get familiar with the worktlow of auditing, but I was also given the opportunity to work with the clients, enabling me to enhance my communication skills. Through working with the professionals, I realized that teamwork is vital for moving ahead in a very competitive business world. The experience of working for big company will definitely give me the confidence to succeed in my future career."

### Michael Lam

Summer Intern at OCBC Wing Hang Bank

"I am glad that I could have opportunity to participate in the financial risk-based project during my internship. I not only learned how to prepare credit proposals, but also have chance to know more about the procedures of purchasing property through lending from banks. This internship

induces my interest to notice more about the residential mortgage news and I find that the competition between banks in the business of mortgage loan is far more vigorous than what I expect. I am thankful to OCBC Wing Hang Bank for offering me such an invaluable chance.



### **Charlotte Ng**

Marketing and Research Intern at Aristo

"It was a great opportunity for me to acquire work-based learning in Aristo. During the internship period, my supervisor provided me with a valuable chance to set the topic and design a quantitative questionnaire to collect commercial data. It helped train-up my creativity and sense of doing the research projects. I really enjoyed my time in Aristo and the practical experience I have gained through the internship makes me more confident to develop my career in the field of data analysis after graduation."

Joined the market risk team as an intern in Financial Services Risk Management Department of EY, I worked closely with the clients and engaged in the Interest rate risk in the banking book (IRRBB) project for one of the local banks in Hong Kong. From the intensive work and training, I learnt a lot every day. The job nature was closely related to what I have learnt from the Investment Science programme, including the statistical modeling, SAS programming, option pricing and so on. We worked as a team including my seniors and manager to solve challenges from our clients, which is critical in this industry. I felt that I was really engaged into the team, not just as an intern. The experience was so valuable and it was definitely a great exposure for my future career development."



**Chester Cheng** Ernst & Young (2<sup>nd</sup> from the left)