

东南大学 吴健雄学院

亲爱的院长:

祝好!

我们欣喜地看到兄弟院校已经从疫情中走出来。过去一年对港科大电子系来说 异常艰辛,我们在保障师生安全的前提下,尽全力保持教学与科研活动的运行。作为 香港最好的工科院校,我们港科大一如既往地欢迎大陆兄弟院校的学生与老师来这里 交流,学习,和研究。

感谢贵院一直对我系直博招生项目(PhD Early Admission Scheme, PhD-EAS)工作的支持。在贵院领导老师的积极协助和推动下,我们的直博招生项目已经合作进行了十多年。我们港科大电子系的直博项目定位于提前招收少量学业项尖而且研究能力出众的大三学生进入我们的博士研究课程。目前,在国内与国际上有十多所顶尖学府是我们长期的合作兄弟院校。多年来,通过该项目,我们录取了众多能力非常优秀的学生。他们在我系踏实工作,取得了很多国际领先的研究成果。在新的一年里,我们诚挚地希望能更上一层楼,与贵院建立更深入、长期和全面的合作关系。

今年,我们诚邀贵院推荐<u>四</u>名成绩优异,并有志于在港科大电子系获取博士学位的大三学生申请来我系就读。学生的专业领域不限。最终录取结果将取决于同学的平时成绩,研究能力,和在两轮面试中的表现。第一轮面试由我系的教授于3月中通过视频或者电话进行,第二轮面试将于5月底在港科大校园进行。我们计划安排一个EAS项目的简介,具体会议信息将和您进一步联系确认,您到时可以发送给感兴趣的同学。

为不影响贵院秋季保送研究生招生计划,请申请人在2023年3月12日或之前将已填妥的申请表及有关文件(包括由校方提供的成绩单、院内成绩排名、英文个人陈述及奖项或资格证书副本等)整合成一份PDF档案发送至eceeas@ust.hk。请使用"PhD-EAS 2024"作为电子邮件的标题,我们会回复电子邮件并确认有关文件。学生的申请材料将提交我系研究生学术委员会审查。我们会在贵院保送研究生招生截止日期前,将录取结果通知学生本人及贵院研究生招生负责人。

我校自一九九一年开办,二十多年间建立了良好的国际声誉。研究生培养工作招收了大量来自国内一流学府的优秀学生。随信附上我系的研究生课程介绍及其它有关资料,供贵院及有志来我校就读的学生参考。概括来说,我们的研究工作集中在以下八大方面:

一、生物医学工程 (Biomedical Engineering)

This area targets engineering solutions for problems in medicine and the life sciences. This research stream covers engineering principles and materials technologies applied to Medical Imaging, Biomedical Optics and Biophotonics, Neuroengineering, Medical Electronics, Bioinformatics/Computational Biology, Biosignal Processing, Biomedical Microdevices and BioMEMS.

二、自动控制和机器人系统 (Control and Robotic Systems)

This area covers control and robotic systems theory, optimization theory, detection and estimation, networked sensing and control, and their applications in next-generation industry robots, multi-agent systems, manufacturing automation, aeronautical and aerospace systems, autonomous vehicles, energy systems, intelligent transportation, medical and healthcare systems.

三、数据科学及人工智能 (Data Science and AI)

This area is devoted to the development of theory and algorithms in a variety of domains such as Big Data Analytics, Artificial Intelligence, Speech and Language Processing, Financial Analytics, Computational Biology, Bioinformatics, Neural Engineering, Deep Learning, and Signal Processing.

四、集成电路与系统 (Integrated Circuits and Systems)

This area includes all aspects of today's integrated circuits and systems and systemon-chip as well as embedded systems solutions. This research stream covers Control and Optimization (including system and control theory, optimization theory, detection and estimation, multi-agent systems, networked sensing and control), Robotics and Automation (including mechatronics, and autonomous systems).

五、微电子 (Microelectronics)

This area is devoted to the development of principles, material and device technologies applied to manipulating charges in micro-/nano-structures including Micro-/Nano-electronics, Semiconductor/Novel Materials and Devices, Nanofabrication Technology, Microelectromechanical Systems, Microsystem Integration, and Flexible Electronics.

六、光电子 (Photonics)

This area is devoted to the development of principles, material and device technologies applied to generating, manipulating and detecting light (photons) for applications including Displays, Optoelectronics, Lasers, Nonlinear Photonics, Nanophotonics, Biophotonics, Silicon Photonics, and Electronic-Photonic Integration.

七、量子工程 (Quantum Engineering)

This area is devoted to the development of principles, theories and algorithms, material and device technologies applied to manipulating quantum systems and quantum information for emerging applications including Quantum Materials, Quantum Devices, Quantum Control, Quantum Sensing and Metrology, Quantum Photonics, and Quantum Simulators.

八、无线通讯与网络 (Wireless Communications and Networking)

In recent years, wireless communications and networking has become extremely important throughout the world and in particular for Hong Kong and China. This area includes emerging Wireless Communications, IoT Systems, 6G, Machine Learning, Ambient RF Systems, Edge Computing and Communications, Computer Networking, Visible Light Communications, Coding and Information theory.



我校拥有优良的师资、先进的实验设备和优美的环境。我校于2022-2023年度对每名博士研究生提供每月港币18,030元的助学金,下一年度的金额或会略作调整。研究生应缴交的费用包括学费每年港币42,100元及宿费每月约港币2,600元。获录取的学生将不能随意更改攻读课程。

通过两轮面试并成功从直博项目中录取的学生将会收到我系发出「有条件录取通知书 (Conditional Offer)」。其中的条件包括:

- (i) 达到我校研究生的基本入学要求, 详情请查阅: https://pg.ust.hk/prospective-students/admissions/Admission-to-Hong-Kong-Campus/admission-requirements
- (ii) 学生需自行联系意向导师, 透过交流再做双向选择, 并确保最迟在2023/24年度秋季入学**前**找到合适的导师。

从直博项目中招收到的特别优秀学生,我系会积极推荐申请由香港政府提供的留学博士奖学金 (Hong Kong PhD Fellowship Scheme)。该奖学金为资助来自全球最优秀的学生而设,奖学金为期四年,现为每月港币27,100元,挑选标准包括学习成绩、科研成就及潜力、领导才能等。我系每年有多人获此殊荣。

如有查询,请与我系研究生学术委员会范智勇教授以及施凌教授联络,他们的电邮地址是 eezfan@ust.hk 以及 eesling@ust.hk。有关我系研究生课程的详细资料,亦可参阅以下网址:https://ece.hkust.edu.hk。

期待着您的回音。

顺颂

教祺

香港科技大学 电子及计算机工程学系 系主任

潘永安教授(Prof. Andrew Poon)

2023年2月20日

附件:

- (1) 电子及计算机工程系 2024 优先录取计划申请表 PhD-EAS Application Form 2024-25
- (2) 工程系研究生教育概要 School of Engineering Postgraduate Programs https://ebookshelf.ust.hk/flippingbook/G20500/mobile/index.html
- (3) 研究生课程及入学须知 Postgraduate Prospectus
 https://ebookshelf.ust.hk/flippingbook/G21571_Prospectus/mobile/index.html
- (4) 香港留学博士奖学金简介 Hong Kong PhD Fellowship Scheme (HKPFS) http://pg.ust.hk/hkpfs
- (5) 电子及计算机工程系 优先录取学生感言 PhD-EAS Students Sharing https://ece.hkust.edu.hk/sites/ece-prod.sites2.ust.hk/files/ECE_PhD-EAS_Testimonials.pdf
- (6) 电子及计算机工程系 香港奖学金获得者感言 HKPFS Student Sharing https://seng.ust.hk/academics/research-postgraduate/student-sharing
- (7) 电子及计算机工程系 优先录取计划宣传简介 PhD-EAS Promotion Catalog https://ece.hkust.edu.hk/sites/ece-prod.sites2.ust.hk/files/ECE_catalog.pdf
- (8) 电子及计算机工程系 优先录取计划宣传海报 PhD-EAS Promotion Poster https://ece.hkust.edu.hk/sites/ece-prod.sites2.ust.hk/files/ECE_poster.pdf