

## Openings for PhD & Postdoc & Research Assistant in NUS



Dr. Yueming JIN's lab from **NUS BME** has multiple openings for **PhD students, postdoctoral fellows, research assistants, interns, visitors**, etc. We are dedicated to the interdisciplinary research of **artificial intelligence, surgical vision, medical image analysis**. We are always looking at the talented applicants to join the lab!

### Who we are

National University of Singapore (NUS) is an internationally renowned research university. NUS ranks 21st in the Times Higher Education World University Rankings, and 11th in the QS World University Rankings. Dept. of BME ranks 11th and Dept. of ECE ranks 14th in the world ranking from ARWU2021.

Dr. Yueming JIN will join NUS BME & ECE as Assistant Professor on Jan 2023. Before that, she is a senior research fellow at the Department of Computer Science at University College London (UCL). She has received her Ph.D. degree in the Department of Computer Science and Engineering from The Chinese University of Hong Kong (CUHK) in 2019. She obtained Hong Kong PhD Fellowship in 2015. She received several premium awards including Best Paper Award of MedIA-MICCAI in 2017, NIH Award in MICCAI 2020, Young Scientist Publication Impact Award Finalist in MICCAI 2021, Best Paper Award in Medical Robotics in ICRA 2021. She also led team winning four international grand challenges about robotic surgical data science. She has published 40+ papers in top-tier conferences and high impact journals in this area, including IEEE-TMI, MedIA, Radiology, ICCV, ECCV, MICCAI, ICRA, IROS, etc. She serves as Session Chair of ICRA'21, Workshop and Challenge Organizer of MICCAI'22, PC member of AAAI'21-22. Her current Google Scholar citation reaches 2000+ with h-index 17.

### Recent research areas

#### 1. Technology-oriented

- Data/annotation efficient learning & Large-scale training for medical imaging analysis;
- Learning with multi-modality signals in robotic surgery, such as audio, text, and kinematics;
- Reinforcement learning for sim-to-real training; etc

#### 2. Application-oriented

- AI for robotic surgical data science, including surgical video analysis, 3D surgical vision analysis, and sim-to-real learning;
- AI for analyzing time-series medical data, such as 4D MRI and cell sequence; etc

## Opening details

### 1. PhD student

PhD students are mainly for admission in August 2023. There are multiple full Ph.D. scholarships available (tuition included; ~62.5k SGD per year) in the lab. For excellent students, I will recommend and be happy to nominate to apply President's Graduate Fellowship or AISG PhD Fellowship.

Stand out yourself for PhD positions

- Strong self-motivation and curiosity
- Have published first-author papers in top-tier journal and conference, such as TMI, Media, CVPR, ICCV, AAAI, ICRA, MICCAI, ECCV, etc
- Strong learning capability, such as top xx%, ranking xx out of xx, in your undergraduate study; any world-class/national awards.
- Good programming capability and proficient in English reading/writing (requirements made by school: [TOEFL/IELTS/GRE](#))

Application portal and more details (Note: main round for August 2023 is due on **1<sup>st</sup> Jan 2023**): <https://cde.nus.edu.sg/graduate/graduate-programmes-by-research/>

### 2. Postdoc

There are 1-2 intakes available in the lab. The starting date is flexible, but better within Spring 2023. The competitive salary (~5500 SGD per month) is provided with NUS benefits, which can be discussed if you are exceptionally excellent. Apart from publishing the high-impact research work, parts of your job are to mentor junior students and contribute to grant application, in which your mentorship and skills for writing proposal shall be developed.

Stand out yourself for Postdoc positions

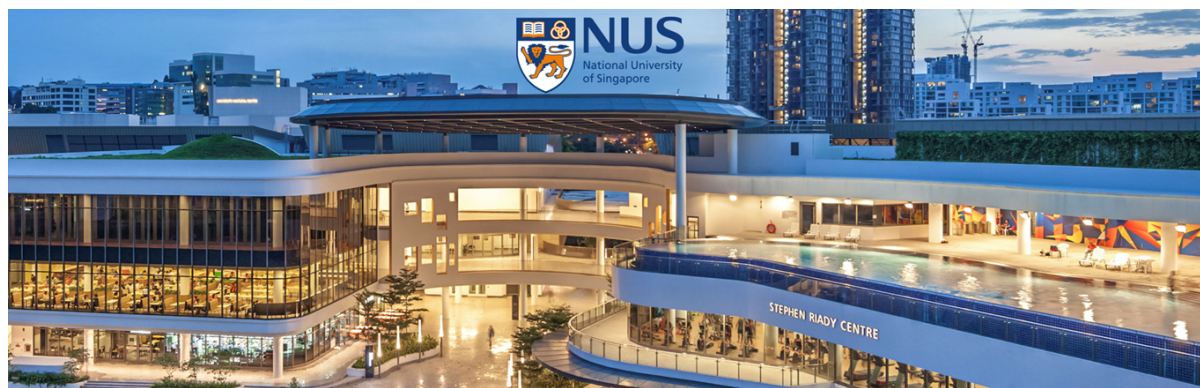
- Good publication record and research experience in AI for surgical vision, medical image analysis
- Collaboration experience with clinicians and surgeons
- Duration is generally 2 years, and at least 1 year if you are exceptionally excellent

Other research positions such as **visiting PhD students, internship and research assistant** are also available.

## How to apply

If you are interested in working with me, please send your CV, transcripts (with ranking); papers, research statement (preferred), and other supporting materials, to [ymjin5341@gmail.com](mailto:ymjin5341@gmail.com). Email subject can be 'PhD/Postdoc/RA Application - Your School – Name'. Shortlisted candidates will be noticed. Due to the large amount of emails received, I may not be able to reply to each individually.

## 新加坡 NUS 金玥明老师课题组招收 AI/Healthcare 方向全奖博士生/博士后/科研助理



### 学校简介:

新加坡国立大学 (National University of Singapore), 简称国大 (NUS), 是亚洲顶尖、国际知名的研究型大学。2022 年, 新加坡国大在泰晤士高等教育世界大学排名为世界第 21 名, QS 世界大学排名为世界第 11 名。生物医学工程专业 BME 排名世界第 11 位, 电子计算机工程 ECE 排名世界第 14 位 (2021ARWU)。

### 导师简介:

金玥明博士目前于伦敦大学学院 UCL 计算机科学学系-Prof. Danail Stoyanov 实验室 WEISS 从事博士后研究, 将于明年 1 月加入新加坡国立大学 Department of BME 和 Department of ECE 任助理教授。此前, 她于香港中文大学 Department of CSE 获得博士学位, 师从 Prof. Pheng-Ann Heng 和 Prof. Chi-Wing Fu。

她的研究方向为机器学习及其在医疗领域的应用, 主要集中在手术机器人视觉感知和医学影像分析。在 IEEE-TMI, MedIA, Radiology, ICCV, ECCV, MICCAI, ICRA 等医学影像分析, 人工智能, 计算机视觉, 机器人等相关顶级会议和期刊发表论文 40 余篇, 谷歌引用 2000 余次。曾获 HKPFS, MICCAI-MedIA Best Paper Award, IEEE ICRA Best Paper Award in Medical Robotics, MICCAI NIH Award 等。担任多个顶级会议和期刊审稿人, 担任 ICRA 2021 Session Chair, 参与组织 MICCAI 2022 Workshop 及竞赛, 博士后期间曾指导多名博士以及硕士生的项目, 曾带领团队参与过许多医学图像处理国际竞赛并获得多个冠军。

个人主页: <https://yuemingjin.github.io/>

### 实验室当前具体研究方向:

#### 1. Technology-oriented

- Data/annotation efficient learning & Large-scale training for medical imaging analysis;
- Learning with multi-modality signals in robotic surgery, such as audio, text, and kinematics;
- Reinforcement learning for sim-to-real training; etc

#### 2. Application-oriented

- AI for robotic surgical data science, including surgical video analysis, 3D surgical vision analysis, and sim-to-real learning;
- AI for analyzing time-series medical data, such as 4D MRI and cell sequence; etc

### 招生信息:

实验室目前有多个 2023 年秋季入学的博士 PhD 名额, 以及一些博士后 Postdoc/研究助理 RA/实习生 Intern 职位(2023 年 1 月即可开始)。欢迎对人工智能,医学影像处理,3D 视觉,机器人的研究感兴趣的同学申请。

- 博士后薪资非常具有竞争力, 原则上一人一事一议。
- 博士生提供每年约 62500 新币 (包含学费) 的全额奖学金, 优秀的同学会帮助提名申请 President's Graduate Fellowship (校长奖学金) 以及 AISG PhD Fellowship 等。更多信息请参考: <https://cde.nus.edu.sg/graduate/graduate-programmes-by-research/>
- 如果已有一定科研经历, 并且对于课题组研究方向感兴趣, 欢迎来申请 PhD/Postdoc, 一起推动人工智能医疗的交叉研究。对于有强烈科研意愿 (在 gap 有意向读 PhD) 的同学, 也欢迎来申请 RA/Intern 提早在科研领域里快速成长, 并且这里提供薪资支持, 任职期满有机会继续在 NUS 攻读 PhD, 或推荐至其他国际一流学府深造, 名额有限希望及早申请。

### 实验室为大家提供:

- 尊重学生想法, 目标在建设友好开放有活力的实验室。
- 耐心细心的科研指导。
- 充分的成长空间, 会推荐与支持进行海外交流访问和实习。
- 充足的计算资源, 算力充足。
- 实验室隶属于 Department 多个 institution 下, 合作机会广泛。

### 招生要求:

1. 热爱科研, 对于科研有很强的自我驱动力, 和良好的自学能力。
2. 有扎实的数学和编程基础, 较强英语阅读、写作和沟通能力。
3. 有相关领域的研究经历, 发表过论文者优先。
4. 成绩优秀或获得过国际/国家奖项者优先。

### 联系方式:

欢迎感兴趣的同学将以下资料发到邮箱 [ymjin5341@gmail.com](mailto:ymjin5341@gmail.com): 简历 (包含成绩, 排名, 研究经历), 代表性科研成果 如有 (可以以少于 5 页 PPT 展示), 其他可以展示 excellence 的内容。邮件主题: PhD/Postdoc/RA Application - Your School – Name。访问学者、联合培养博士生也欢迎联系咨询。适合的申请者将会收到邮件回复。