



PhD & Master Students at UIUC in Computer Science

We are looking for talented and highly motivated Computer Science PhD and Master students interested in Machine Learning, Artificial Intelligence, Computer Vision, and Internet of Things from Department of Computer Science, University of Illinois Urbana-Champaign (UIUC). The **UIUC Computer Science** is ranked **2nd** by *CSRankings: Computer Science Rankings* and **5th** by *the U.S. News & World Report* in 2022. The successful candidates will work with an interdisciplinary team led by **Prof. Kaiyu Guan** (<http://faculty.nres.illinois.edu/~kaiyuguan/>, <https://cs.illinois.edu/about/people/all-faculty/kaiyug>), **Prof. Shenlong Wang** (<https://shenlong.web.illinois.edu>), and **Prof. Arindam Banerjee** (<https://arindam.cs.illinois.edu>).

Potential Research Topics:

- **Computer vision and remote sensing**
Topics include: 3D Perception and Modeling, Photorealistic Content Creation, Localization and Mapping, and Robot Simulation and Self-driving.
- **Internet-of-Things (IoT) and multi-scale sensing**
Topics include: Development and Deployment of IoT Sensors, Standardizing Sensor Platforms and Pipeline, and Multi-scale Data-model Fusion.
- **Applications of computer science and computational aspects of learning**
Topics include: Applications of Machine Learning, Deep Learning, Decision Making, Generative and Graphical Models, or High-Dimensional Statistics in Remote Sensing, Hydrology, Agricultural Science, Climate Science, or Ecology.

Qualifications

- **Required Education**
The applications should have a strong background in computer science, computer engineering, or other relevant disciplines.
- **Required Knowledge and Skills**
 - (1) Strong programming skills in Python, C/C++, R, or other languages.
 - (2) Implementation of deep learning and open-source models
 - (3) Domain knowledge such as computer science, hydrology, remote sensing, and electronics
 - (4) Strong ability to multi-task and work cooperatively with others.
- **Application Process**
Prospective students are required to submit the applications through UIUC computer science programs (<https://cs.illinois.edu/admissions/graduate/application-deadlines>) including **Ph.D. in Computer Science (application deadline: December 15)**, **M.S. in Computer Science (application deadline: December 15)**, and **Professional Master of Computer Science (on-campus MCS, deadline: January 15)**. The application process and requirements can be found here (<https://cs.illinois.edu/admissions/graduate/applications-process-requirements>). In the cover letter of application materials, please state that you are interested in PhD or Master programs under the supervision of **Prof. Kaiyu Guan** in particular.

More about the University of Illinois Urbana-Champaign (UIUC): UIUC is a world leader in research, teaching, and public engagement, distinguished by the breadth of its programs, broad academic excellence, and internationally renowned faculty and alumni. Illinois serves the world by creating knowledge, preparing students for lives of impact, and finding solutions to critical societal needs. UIUC ranks top worldwide in Computer Science, Electrical Engineering, and Agricultural Science. The University of Illinois is an Affirmative Action/Equal Opportunity Employer. The administration, faculty, and staff embrace diversity and are committed to attracting qualified candidates who also embrace and value diversity and inclusivity. Visit www.inclusiveillinois.illinois.edu. International students have the flexibility to study remotely considering the COVID-19 situation.