



Dr. Qingyun Wu at Penn State University is recruiting Ph.D. students in machine learning.

I am looking for self-motivated Ph.D. students to work with me starting from fall 2021 or spring 2022 in the College of Information science and technology at Penn State University (<https://ist.psu.edu/>). Our research will mainly be driven by achieving the goal of building self-adaptive learning systems. One example of such a self-adaptive learning system is the automated machine learning system. We will be working on various aspects of it, for example, resource-frugal hyperparameter optimization, adaptive model selection, and resource-adaptive model tuning and training. To this end, our research will involve developing new machine learning and optimization techniques for adaptive planning, search, online decision-making and etc. Examples of such techniques include reinforcement learning, multi-armed bandit, and online optimization. Research in this direction will have a substantial impact on solving various real-world problems.

Students with a Bachelor's or Master's degree in computer science/engineering, statistics, mathematics, or other related disciplines are welcome to apply. In particular, I am looking for students who (1) are passionate and self-motivated to do important/revolutionary work in the aforementioned research directions; (2) have a strong mathematical background; and (3) have good programming skills (students who have experience working on open-source projects are especially preferred). Admitted Ph.D. students will be fully funded through a research assistantship or teaching assistantship.

If you are interested, please (1) check the detailed requirements for Ph.D. admission at Penn State University <https://gradschool.psu.edu/graduate-admissions/how-to-apply/new-applicants/requirements-for-graduate-admission/>, mention my name in your research statement, and submit your application at <https://ist.psu.edu/prospective/graduate/application> before January 2021; (2) send me an email at qingyun0327@gmail.com with a short introduction of your research interests, CV and transcripts.

Bio of Qingyun Wu.

Dr. Qingyun Wu is currently a postdoc researcher at Microsoft Research, New York City Lab, hosted by Dr. John Landford and Dr. Sham Kakade. She will be joining the college of information science and technology at Penn State University as an Assistant Professor starting from August 2021. Qingyun obtained her Ph.D. degree in Computer Science from the University of Virginia in June 2020, advised by Prof. Hongning Wang.

Qingyun's research is driven by the goal of building self-adaptive learning systems, which involves developing new machine learning and optimization techniques for adaptive planning, search, online decision-making and etc. The main applications of Qingyun's research work include (1) information retrieval tasks, such as personalized recommendation, online learning to rank, and ads prediction, and (2) automated machine learning, such as economical hyperparameter optimization and adaptive model selection.

Qingyun collaborates a lot with industrial research labs. During her Ph.D. study, she interned at Yahoo Research, Adobe Research, and Microsoft Research. Qingyun is one of the main authors of a fast and lightweight AutoML library <https://github.com/microsoft/FLAML> and her research work is published in many top-tier venues, including SIGIR, WWW, KDD, AAAI, and NeurIPS. Qingyun's work is recognized by multiple prestigious awards, including the Virginia Engineering Foundation Fellowship, the Best Graduate Research Short award at CAPWIC 2017, Rising Stars in EECS 2019, and the Best Paper Award at SIGIR 2019. If you are interested in knowing more about Qingyun's research work, please visit Qingyun's homepage at <https://qingyun-wu.github.io/> and Qingyun's google scholar page at <https://scholar.google.com/citations?user=Y54J21sAAAAJ&hl=en>