

Postdoctoral Researcher Position Available

(#Machine Learning, #Autonomous Driving, #Planning)

[Description] This postdoctoral researcher position is jointly held by the College of Engineering and College of Science at Purdue University. The position offers a unique opportunity to conduct multidisciplinary research at the intersection of machine learning and autonomous driving. The successful candidate is expected to develop novel algorithms in the fields of deep learning and probabilistic reasoning to serve the planning tasks of autonomous driving, including behavior prediction, decision making, and/or trajectory generation. The candidate will have full access to a fully equipped automated vehicle owned by the lab and a professional test track to collect data and validate the developed algorithms. This position will be jointly mentored by Dr. Ziran Wang, Assistant Professor in the Lyles School of Civil Engineering, and Dr. Ruqi Zhang, Assistant Professor in the Department of Computer Science at Purdue University, and will also collaborate with a diverse team of top talents at both labs.

Desirable candidates for this position should have a Ph.D. degree by the proposed starting date of the position in computer science, electrical engineering, mechanical engineering, civil engineering, or a related field, with a strong background in machine learning. Though not required, experience in autonomous driving and/or robotics is preferred.

[Application] The tentative starting date of this position is Sep/1/2024 or based on the mutual agreement between the candidate and the mentors. The review process will start immediately and end until the position is filled. Interested candidates are encouraged to send an email with both Dr. Wang (<u>rugiz@purdue.edu</u>) and Dr. Zhang (<u>rugiz@purdue.edu</u>) as the recipients including:

- 1. Email title "Postdoc Application-[Full Name]"
- 2. Curriculum Vitae
- 3. Contact information for three references
- 4. Cover letter (optional)
- 5. Sample publications (optional)

[Background] Dr. Ziran Wang is an assistant professor in the College of Engineering at Purdue University (top 10 U.S. engineering program according to US News). His main research interests include autonomous driving, digital twins, and embodied AI. Previously, Dr. Wang worked for Toyota R&D in Silicon Valley as a principal researcher, leading a research team to build next-generation intelligent vehicles. Dr. Wang serves as the founding chair of the IEEE Technical Committee on Internet of Things in Intelligent Transportation Systems, and an associate editor of IEEE Transactions on Intelligent Vehicles and IEEE Internet of Things Journal. He is an author of 60+ papers and 50+ patent applications. He received his Ph.D. degree from the University of California, Riverside. Personal website: http://ziranw.github.io.

Dr. Ruqi Zhang is an assistant professor in the Department of Computer Science at Purdue University (top 15 U.S. computer science program according to CSRankings). Her main research interests include machine learning, deep learning, and probabilistic methods. Previously, Dr. Zhang completed her Ph.D. from Cornell University, and conducted a one-year postdoc at the Institute for Foundations of Machine Learning at UT Austin. She has co-organized multiple ML workshops, including the Symposium on Advances in Approximate Bayesian Inference and ICML Workshop on Sampling and Optimization in Discrete Space. Additionally, she has served as an Area Chair at top ML conferences, such as NeurIPS, AISTATS, and UAI. Personal website: https://ruqizhang.github.io/.

