



## Workshop on Environment-Driven Requirements Engineering (EnvIRE)

<https://homepages.uc.edu/~niunn/EnvIRE/>

September 20 or 21, 2021 ♦ co-located with

29th IEEE International Requirements Engineering Conference (RE'21)



### Objectives

With the rising influence of AI-based systems, it is important for the requirements engineering (RE) community to revisit one of the RE

cornerstones, “*requirements are located in the environment.*” The environment is part of the real world in which the machine (e.g., an AI-based system) is installed and the machine’s effect is observed and evaluated. The re-emergence of AI (especially the black-box deep learning solutions) and the unstoppable penetration of AI-based systems across industries, public sectors, and all walks of life make it important and timely for the RE community to discuss the role of environment in driving various activities: elicitation, modeling, implementation, testing, deployment, and evolution. With the machine becoming more intelligent and embedded, the environment is more open and dynamic. The objective of the EnvIRE Workshop is to bring interested researchers and practitioners together, exchange ideas and visions, and explore a set of open problems to pursue in the years to come.

### Organizers

Zhi Jin, Peking University, China

Nan Niu, University of Cincinnati, USA

Yijun Yu, Open University, UK

### Call for Papers

We solicit position and short papers (~4 pages) to depict challenges, highlight ongoing work, and provoke discussions on:

- How to automatically identify environment assumptions, assertions, and properties?
- What representations are amenable to environment modeling for engineering AI-based systems?
- How can environment phenomena influence system validation and evolution?
- How to handle the uncertainty and incompleteness of environment phenomena and assertions?
- What role do problem analysis and structuring techniques, such as Problem Frames and  $i^*$ , play in engineering smart and connected systems?

Meanwhile, emerging topics are encouraged.

### Important Dates in 2021



Paper submission



Author notification