Application Programming Interfaces (APIs) are an essential mechanism for software reuse. However, over the past two decades, many researchers have shown inherent problems with APIs, such as the lack of useful documentation for proper use, incorrect usage of APIs that lead to bugs and security vulnerability, and difficulties in migrating between API versions. While previous efforts in solving these problems have advanced the state of the art, many of these issues still exist today. The 1st International Workshop on API Usage and Evolution (WAPI) provides a venue for researchers and practitioners to come together and discuss the open challenges that API users and designers face. For example, how can we measure the quality of an API? How can we accurately rely on client code for identifying patterns when the rule of “the majority do it right” does not always hold (e.g., in security-related APIs)? What is the best way to present API recommendations and API usages to a developer? How can we measure or improve the usability of an API? The goal of the workshop is to identify the current open challenges in the area and define a roadmap for innovative solutions.

Organizers:
Sarah Nadi, nadi@ualberta.ca, University of Alberta, Canada
Tien Nguyen, tien.n.nguyen@utdallas.edu, University of Texas at Dallas, USA
Hoan Nguyen, hoan@iastate.edu, Iowa State University, USA
Sven Amann, amann@st.informatik.tu-darmstadt.de, TU Darmstadt, Germany