

Managing humanoid software complexity and enhancing team productivity through simulation, logging and visualization tools, and software practices at IHMC

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Abstract: We will discuss simulation, logging, and visualization tools, as well as team practices at IHMC, which have been successfully used for the DARPA Robotics Challenge and other projects. We have become obsessed with testing and use extensive testing in simulation. However, on real hardware it is much more difficult. We will describe our workflow that combines simulation, automatic unit tests, end-to-end tests, and experiments on real hardware. In addition we'll discuss many of our software development practices and how we use the Atlassian suite of development tools. We are currently in the process of open sourcing many of our simulation and visualization tools and will present how to obtain these tools.