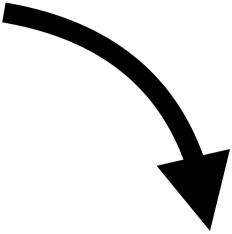
## Research Vision

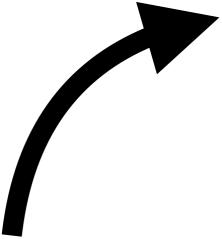
## Study **Programmers**

# **Build Systems**

## **Evaluate with Programmers**







### insights

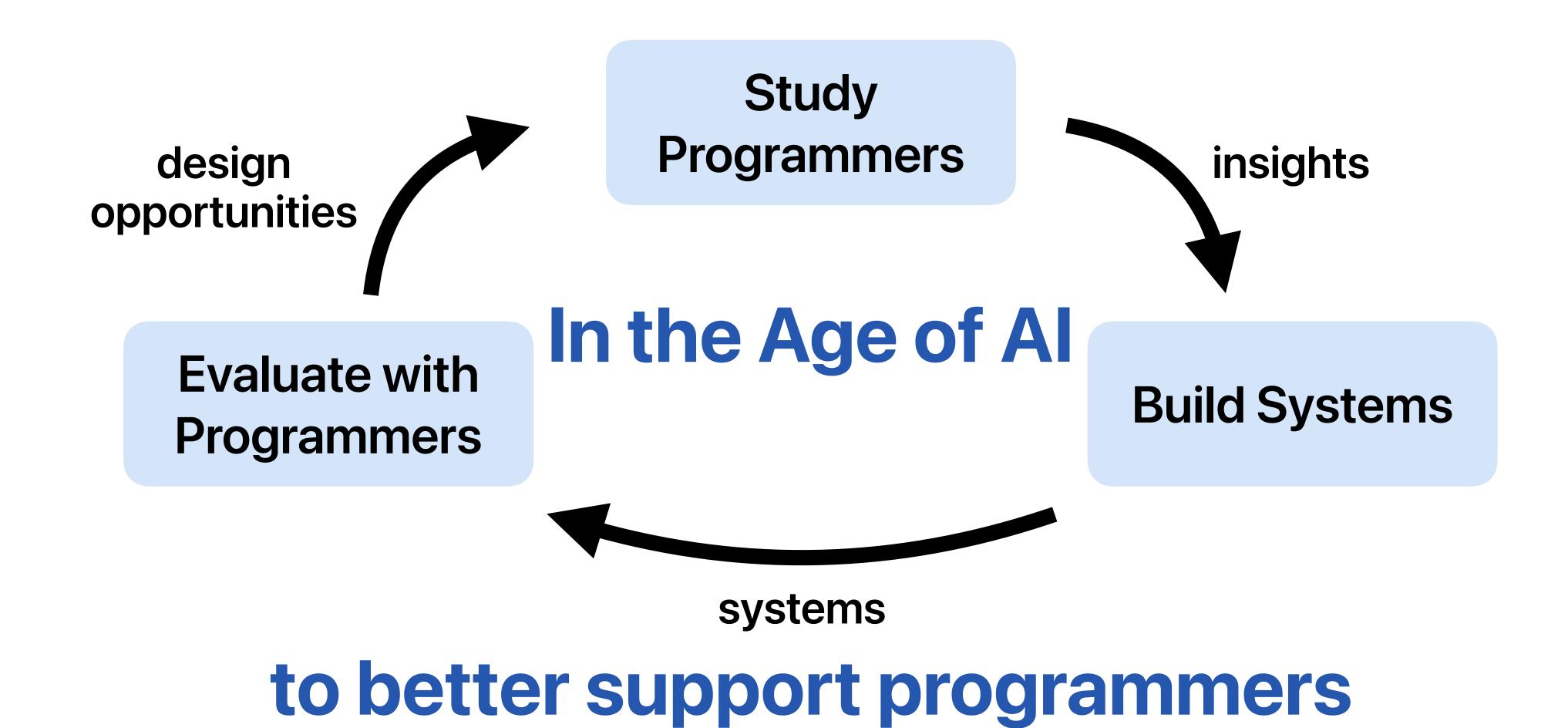
### systems

### design opportunities

# In the Age of Al

## to better support programmers

## Research Vision



### **Current Work**

#### **Software Developers**

Validation Support for Al-Assisted Software Development [CHI 2024]

Visual Debugger for GUI App Development [VL/HCC 2024]

#### **Scientists**

Understanding
Scientific Users of
Computational Notebooks
[ICSE 2025]

Clarity-Driven
Notebook Authoring
[In Submission]

### **Students & Teachers**

Programming
Visualizations for Intro CS
[SIGCSE 2022]

Educational Environment for SMT Solving [MSR TR 2025]