

# Streamlining Dark Matter Data Analysis with Docker and JupyterLab

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## INTRO

- Getting my software to work on your computer isn't always easy, or worthwhile
- Goal is to provide a one-stop shop for data analysis across a collaboration

## METHODS

1. Analysis software is packaged in a portable way, such as Python install script
2. Software gets installed into a Docker container
3. JupyterLab provides interface for file interaction, text editing, etc.
4. Kubernetes is used to orchestrate deployment and management of finalized containers

## RESULTS

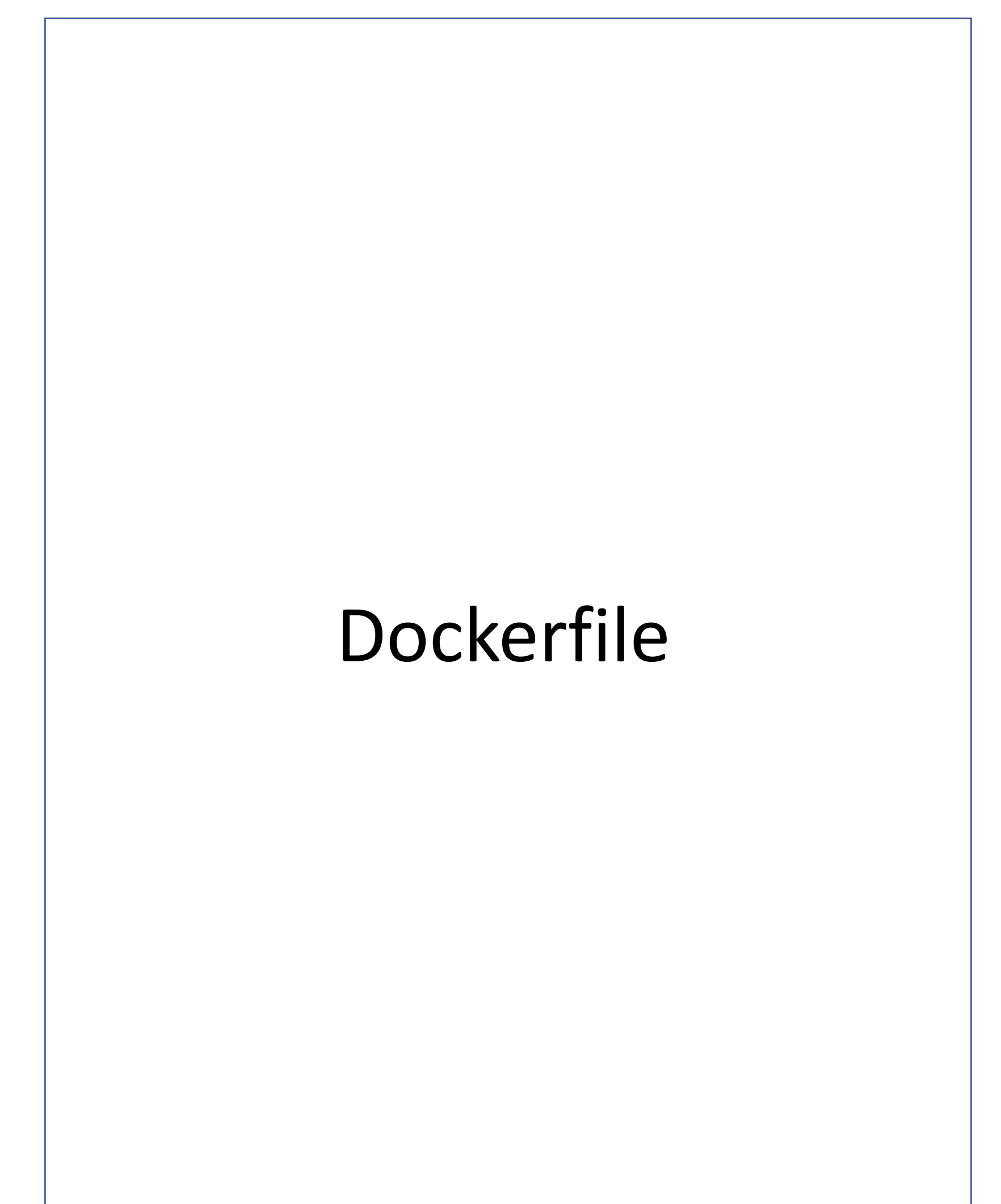
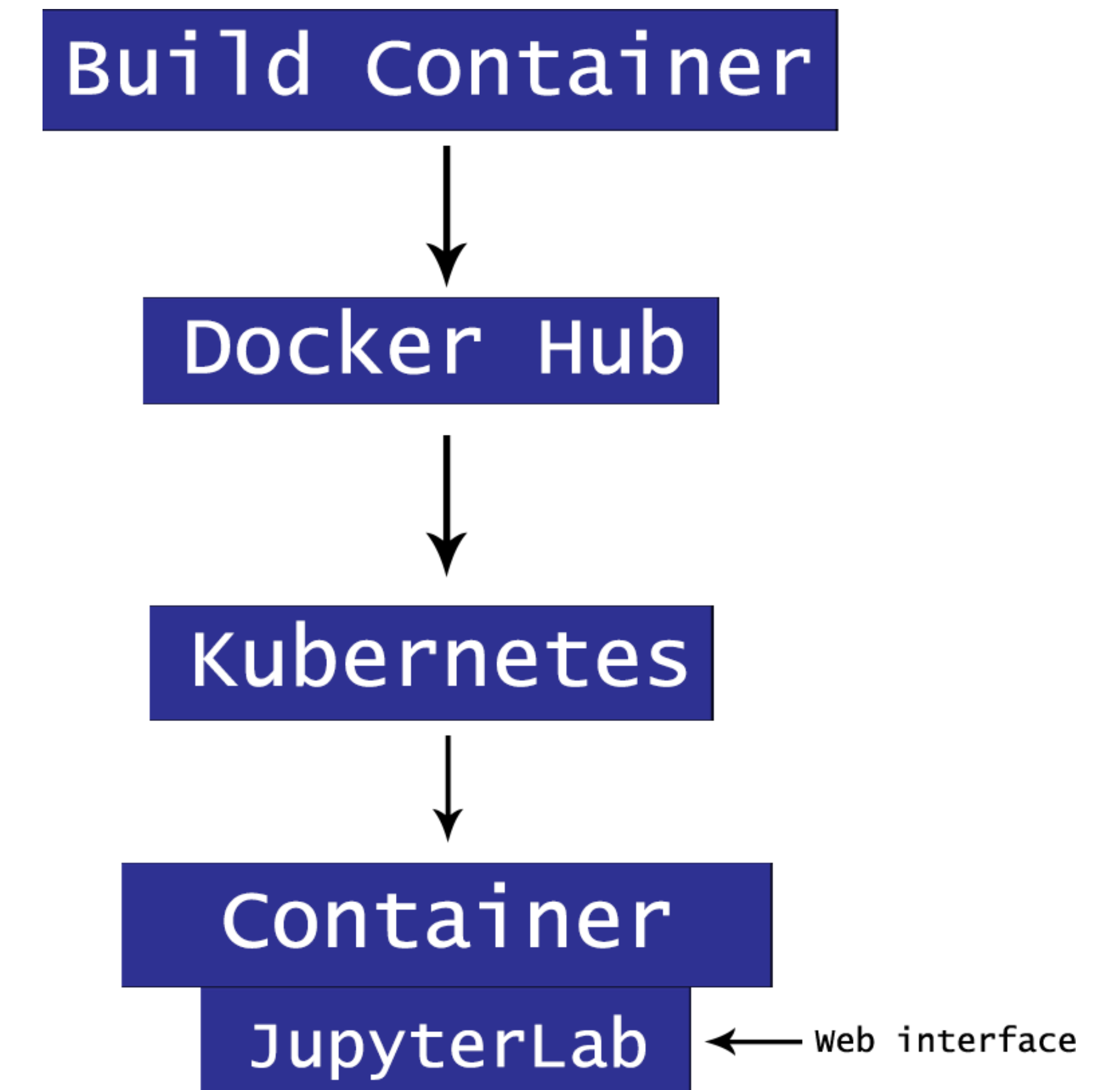
- Ensures users are all using the same code
- Prevents fragmentation of code and streamlines maintenance
- Eliminates users' need for complicated software installation

## DEVELOPMENT

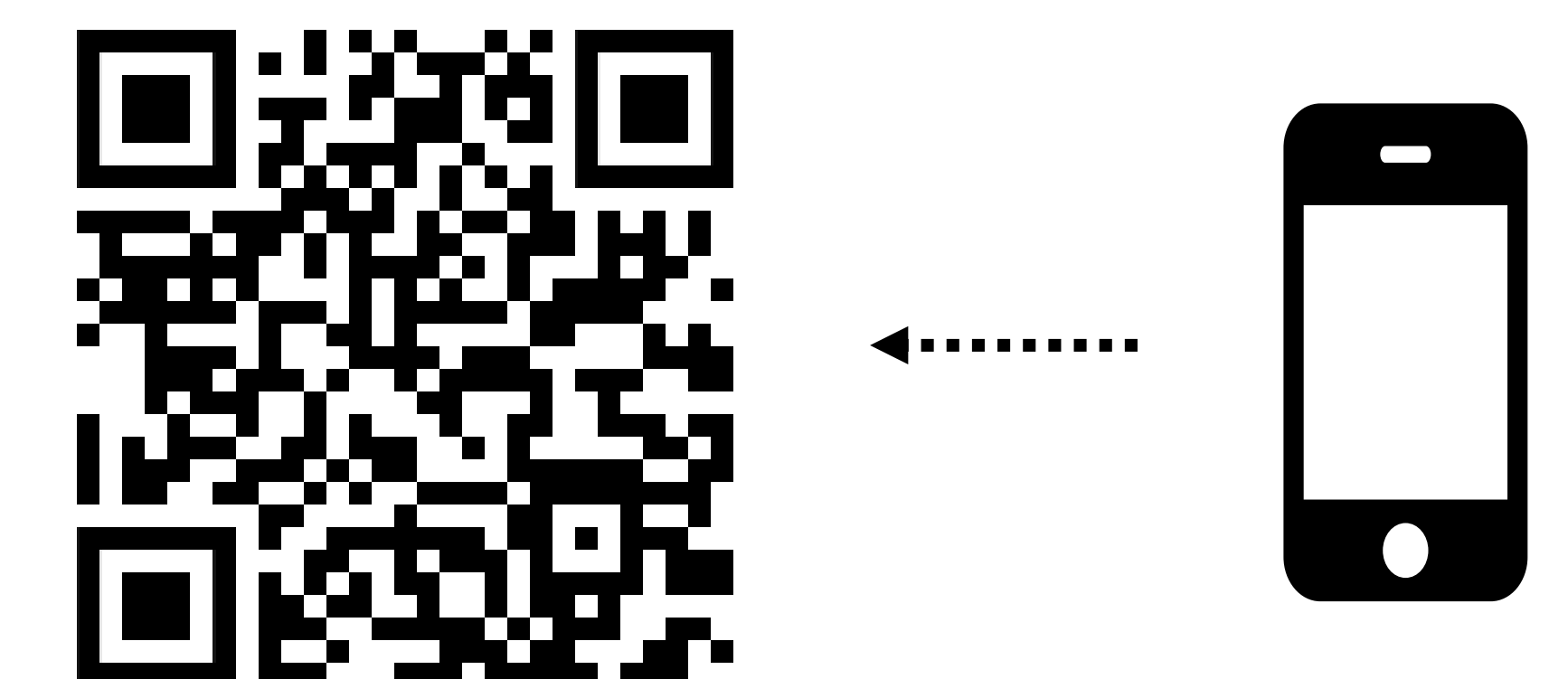
- Need an effective way to test changes to code without rebuilding the entire image
- Automate build process when relevant code is updated



# Dark matter data analysis made easy. No installation necessary!



Take a picture to see the code!



Contact Me:

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