# JUDI Release 0.0.1

Apr 29, 2019

### **Getting Started**

1	Install JUDI   1.1 Quick start	<b>3</b> 3
2	Build Software Pipelines using JUDI	5
3	Execute Software Pipeline Built using JUDI	7
4	Parameter Database in JUDI	9
5	JUDI File	11
6	JUDI Task	13
7	Indices and tables	15

JUDI simplifies building and executing a software pipeline under different parameter settings by automating efficient execution of the pipeline across the settings.

- **Consolidated specification of parameter settings** JUDI provides an easy way to specify all possible parameter settings under which the pipeline needs to be excuted.
- **Files and tasks independent from parameter settings** For each file or a task, a user just specifies the parameters it depends upon and then builds the pipeline as if there were no parameters at all. JUDI makes sure there are seperate instances of the file or the task for each setting of the parameters, creates appropriate association between the file instances and the task instances, and automates an efficient execution of the task instances based on their dependency.
- **Easy plug-and-play** By decoupling parameter settings from files and tasks, JUDI enables plug and play of different stages of the pipeline.

#### Install JUDI

JUDI is implemented as a python package and can be installed using *pip* installer. JUDI depends on python package *pydoit* whose latest versions work with python 3.4 and above. Hence, it is recommended that python 3.4 or above is already installed on the system. JUDI has been tested using python 3.6 on linux based systems.

#### 1.1 Quick start

Assuming you have Python already, install judi:

Build Software Pipelines using JUDI

## CHAPTER $\mathbf{3}$

### Execute Software Pipeline Built using JUDI

Parameter Database in JUDI

JUDI File

JUDI Task

Indices and tables

- genindex
- modindex
- search