

## Scripting

- → adds additional functionality to Ignition
- → enables customization of Ignition to every environment
- → makes operations faster, changeable, more repeatable
- → both responds to and generates events
- → is synonymous with automation
- → enables connectivity to other software platforms



## Python

- → general-purpose scripting language
- → runs on all operating systems
- → very clean, readable, easy-to-use language
- → very popular; very mature (30+ years)
- → very large user community
- → lots of public source code and documentation



# **Jython**

- → Jython is a Python interpreter written in Java
- → Java VM runs Jython code; accesses Java classes
- → Ignition is written in Java; Jython is built-in
- → Jython is based on **Python 2.7**
- → Python 3 code will not always run in Jython
- → https://jython.org and https://python.org





### Ignition Resources

#### **Scripting in Ignition**

https://docs.inductiveautomation.com/docs/8.1/platform/scripting

#### **Python Scripting in Ignition**

https://docs.inductiveautomation.com/docs/8.1/platform/scripting/python-scripting

### **Scripting in Ignition - Inductive University**

https://inductiveuniversity.com/courses/ignition/scripting-in-ignition/8.1

#### **Ignition Discussion Forums**

https://forum.inductiveautomation.com/





### Official Websites

### **Python**

https://python.org

**Jython** 

https://jython.org

**Inductive Automation** 

https://inductiveautomation.com/



## Python 2 Leaning

### **Python 2 Documentation**

https://docs.python.org/2.7/tutorial/index.html

**Python 2 Sandbox** 

https://onecompiler.com/python2/



### Python 3 Learning

#### **Python for Beginners**

https://www.python.org/about/gettingstarted/

**Google's Python Class** 

https://developers.google.com/edu/python

**Beginning Programming with Python** 

https://www.w3schools.com/python/

Python 3 Book + PDF

https://nostarch.com/python-crash-course-3rd-edition





### Code Style Guides

#### PEP-8

https://peps.python.org/pep-0008/

### **Google Python Style Guide**

https://google.github.io/styleguide/pyguide.html

### **Google Java Style Guide**

https://google.github.io/styleguide/javaguide.html

#### **Oracle Java Language Best Practices**

https://docs.oracle.com/cd/A97688\_16/generic.903/bp/java.htm





## Python Miscellaneous

**Python Institute (Python Certifications)** 

https://pythoninstitute.org/

**Python String Formatters** 

https://pyformat.info/



