

# Debugging Splunk Apps, Add-ons

and configurations with  
Microsoft Visual Studio Code

**Jason Conger**

Principal Solutions Engineer | Splunk, Inc.



# Forward-Looking Statements



During the course of this presentation, we may make forward-looking statements regarding future events or plans of the company. We caution you that such statements reflect our current expectations and estimates based on factors currently known to us and that actual events or results may differ materially. The forward-looking statements made in the this presentation are being made as of the time and date of its live presentation. If reviewed after its live presentation, it may not contain current or accurate information. We do not assume any obligation to update any forward-looking statements made herein.

In addition, any information about our roadmap outlines our general product direction and is subject to change at any time without notice. It is for informational purposes only, and shall not be incorporated into any contract or other commitment. Splunk undertakes no obligation either to develop the features or functionalities described or to include any such feature or functionality in a future release.

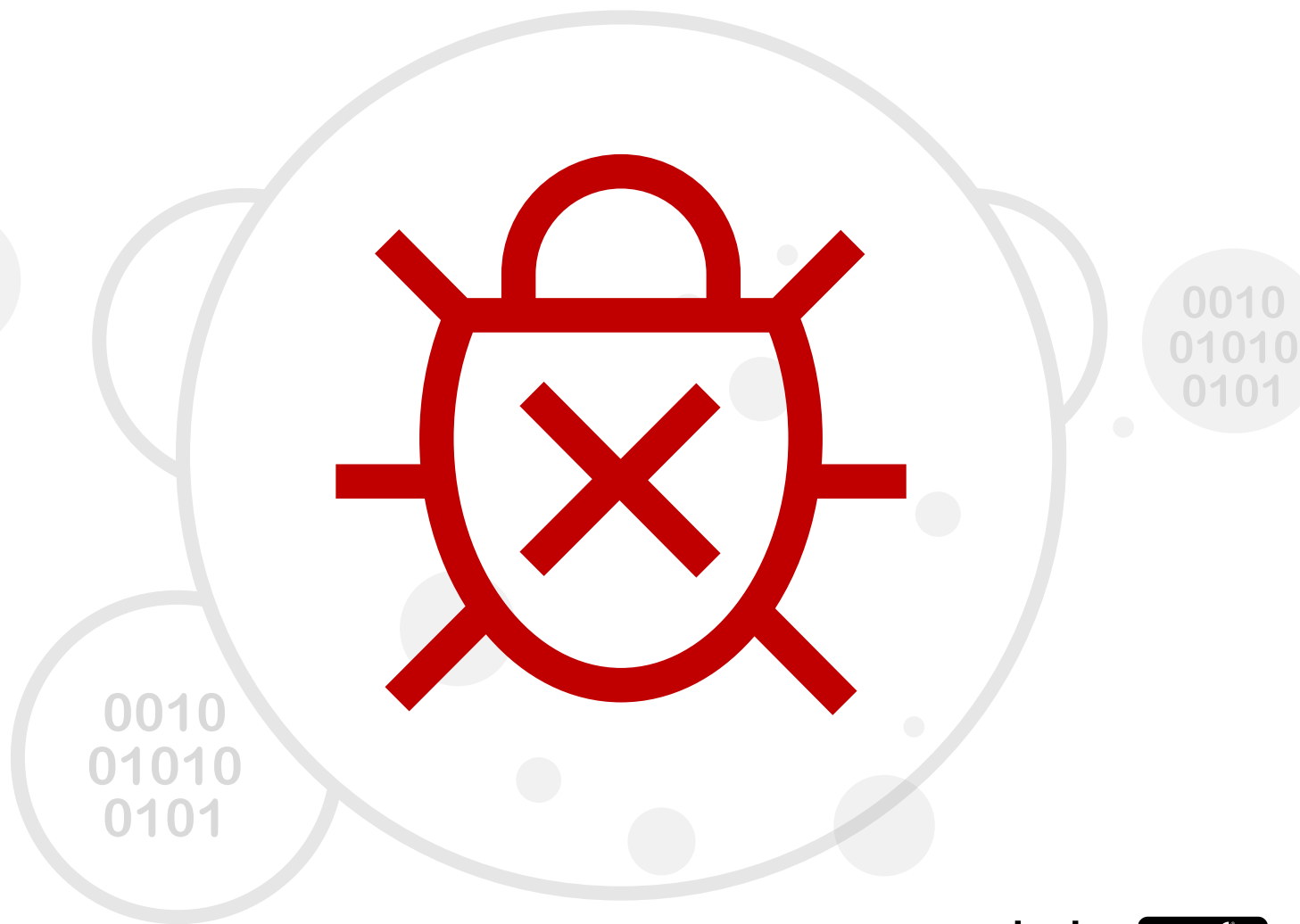
Splunk, Splunk>, Data-to-Everything, D2E and Turn Data Into Doing are trademarks and registered trademarks of Splunk Inc. in the United States and other countries. All other brand names, product names or trademarks belong to their respective owners. © 2020 Splunk Inc. All rights reserved

# Jason Conger

Principal Solutions Engineer | Splunk, Inc.



# Bugs Happen!



# Bugs Happen!

## Frustration



Where and why is my code not working!?

## Productivity Loss



Tracking down bugs can be time-consuming.

## Data Loss



Incorrect configurations can be dangerous!

# Let's get the bugs out!



Developers: increase productivity & decrease frustration.



Admins: avoid catastrophic mistakes & decrease time spent on configurations.



Using cross platform, free, and familiar tools!

# Agenda

## What you will learn

### For Splunk Admins:

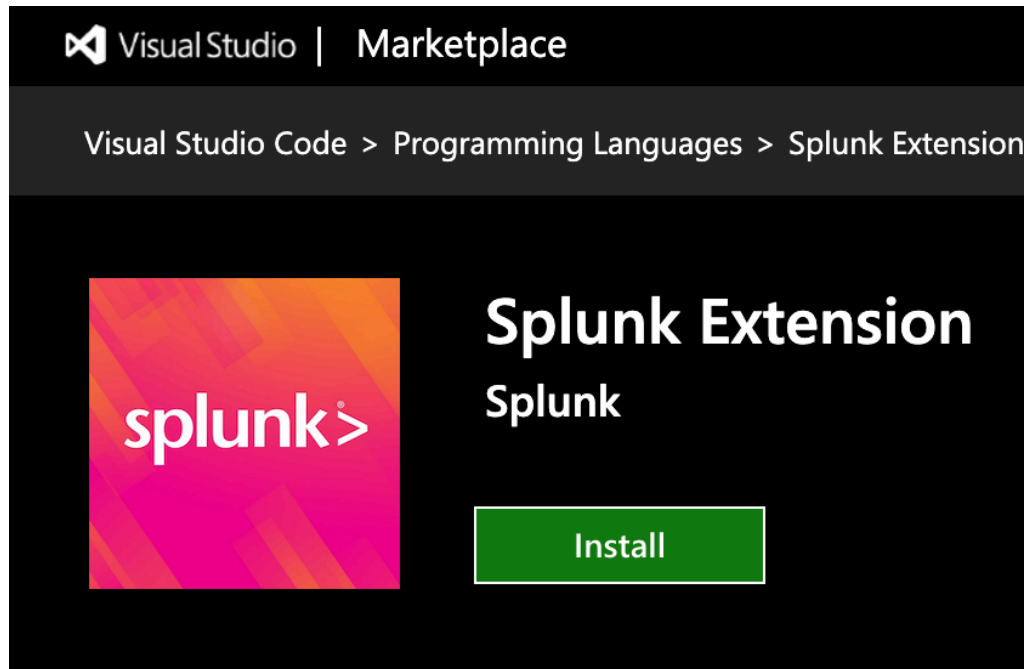
- Context-sensitive auto-completion
- Inline documentation
- Validation while you type

### For Splunk Developers:

- Real debugging
  - Breakpoints, stepping into/over code, variable watchers, call stack inspection, etc.
- Code Templates
- Splunk searches and visualizations in the editor

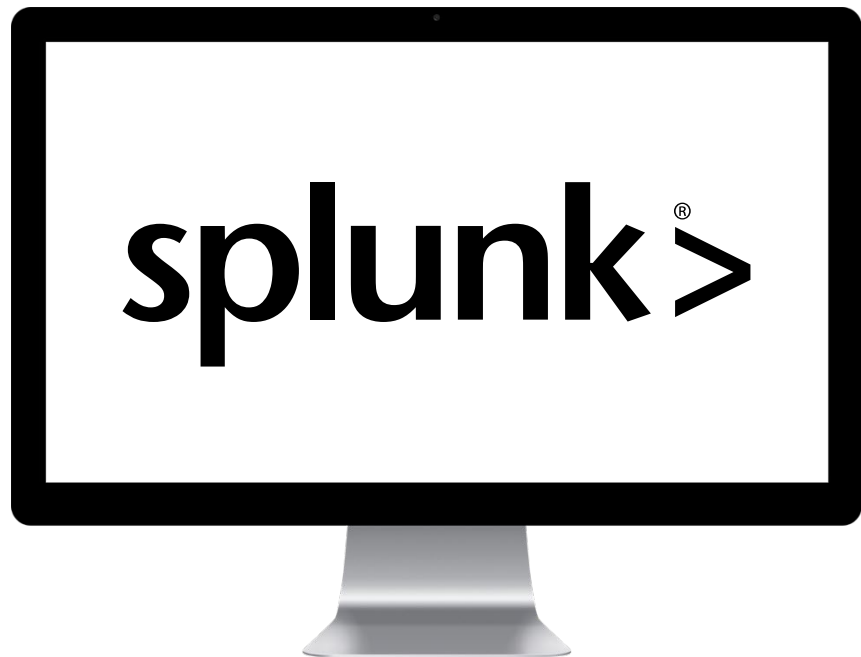


# New Tools for You!



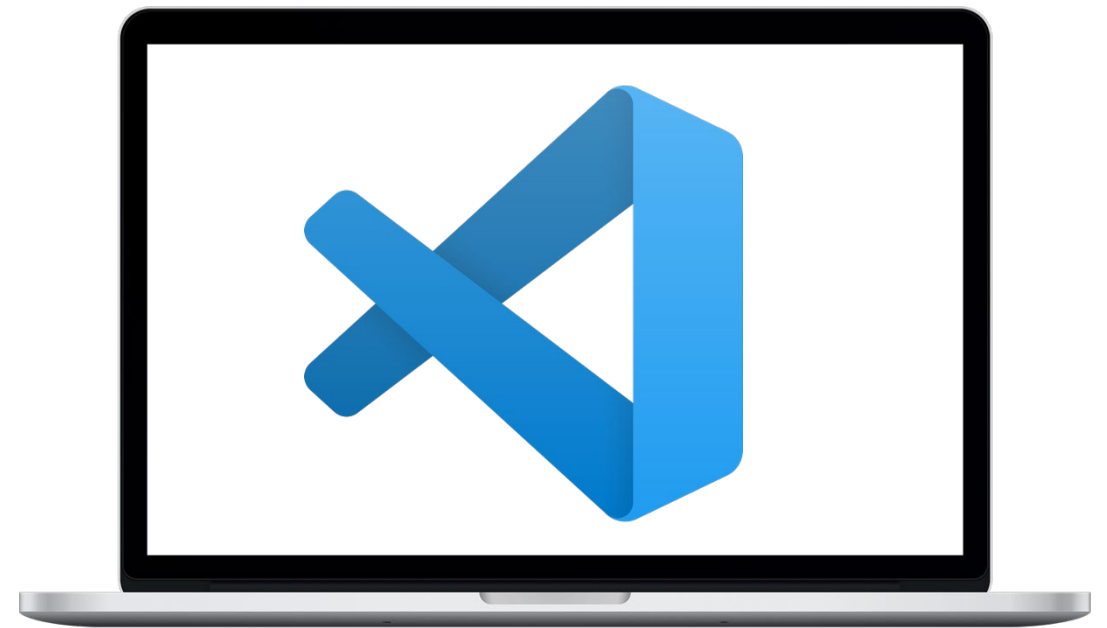
# Why Visual Studio Code?

Isn't that just Windows and .NET?



The world's first Data-to-Everything Platform.

+

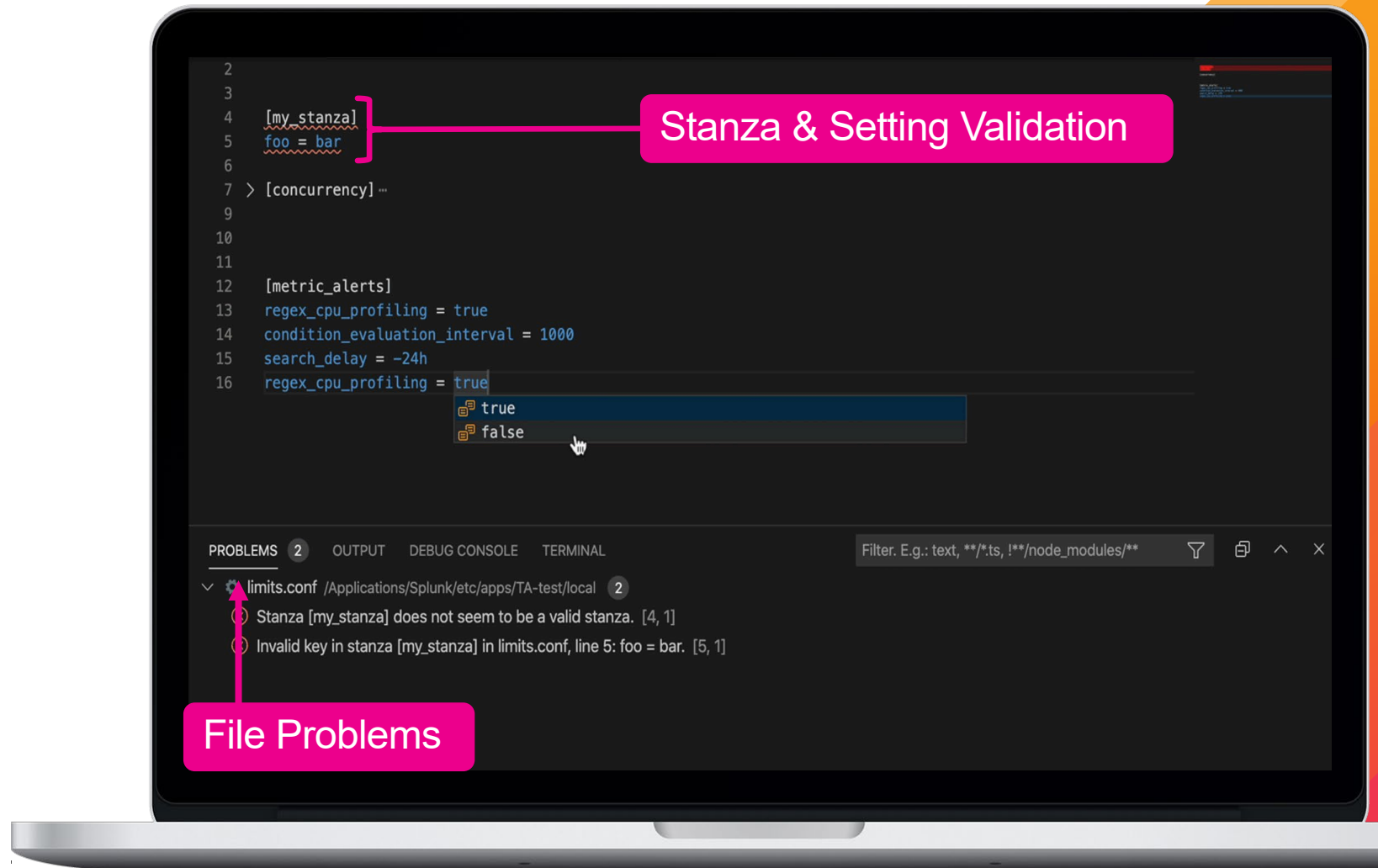


Visual Studio Code is a dominant player ...  
across the board.\*

\*Source: <https://insights.stackoverflow.com/survey/2019>

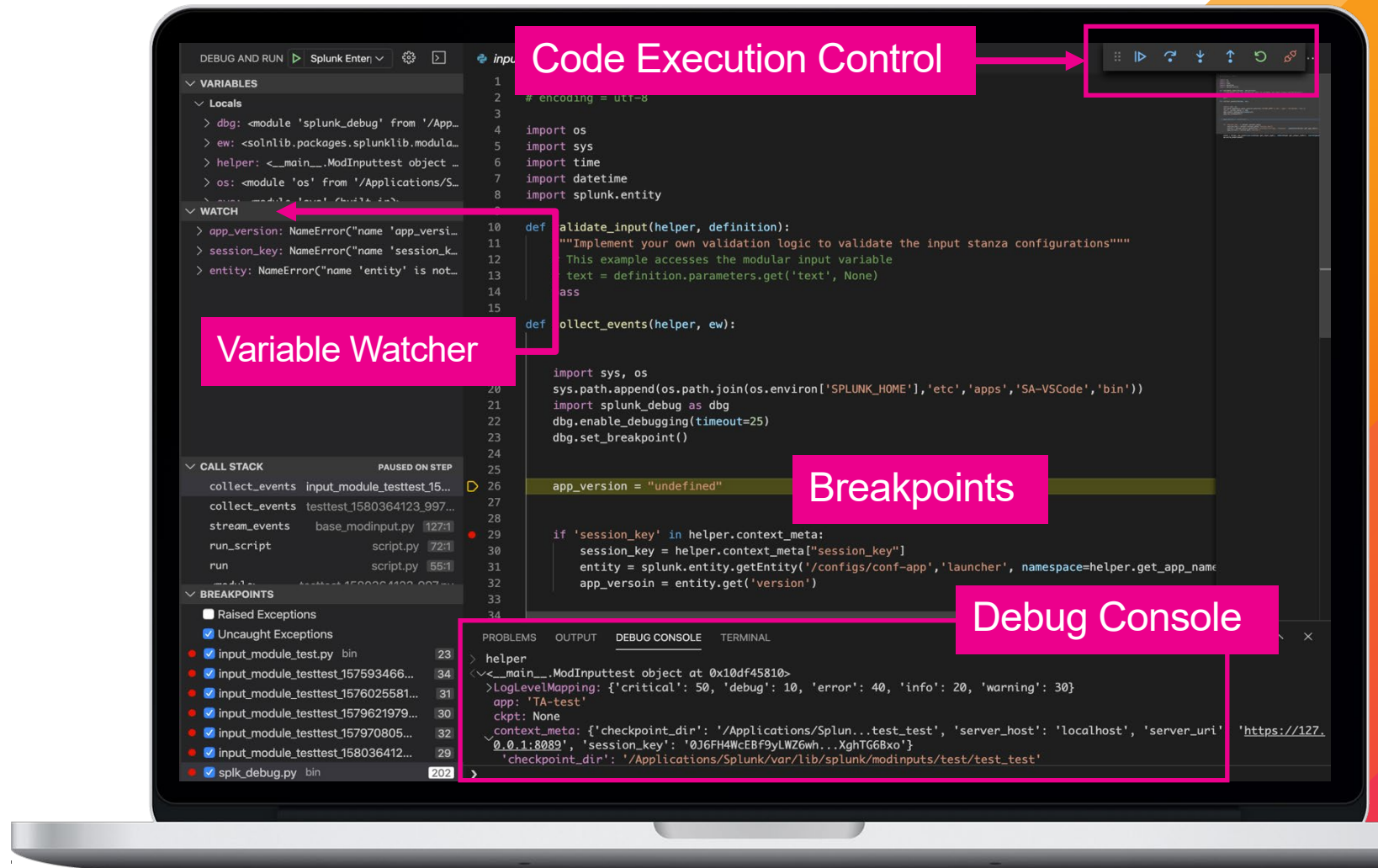
# Splunk Configuration Intelligence

- Context-sensitive inline documentation
- Real-time validation
- Reduces errors
- Saves time



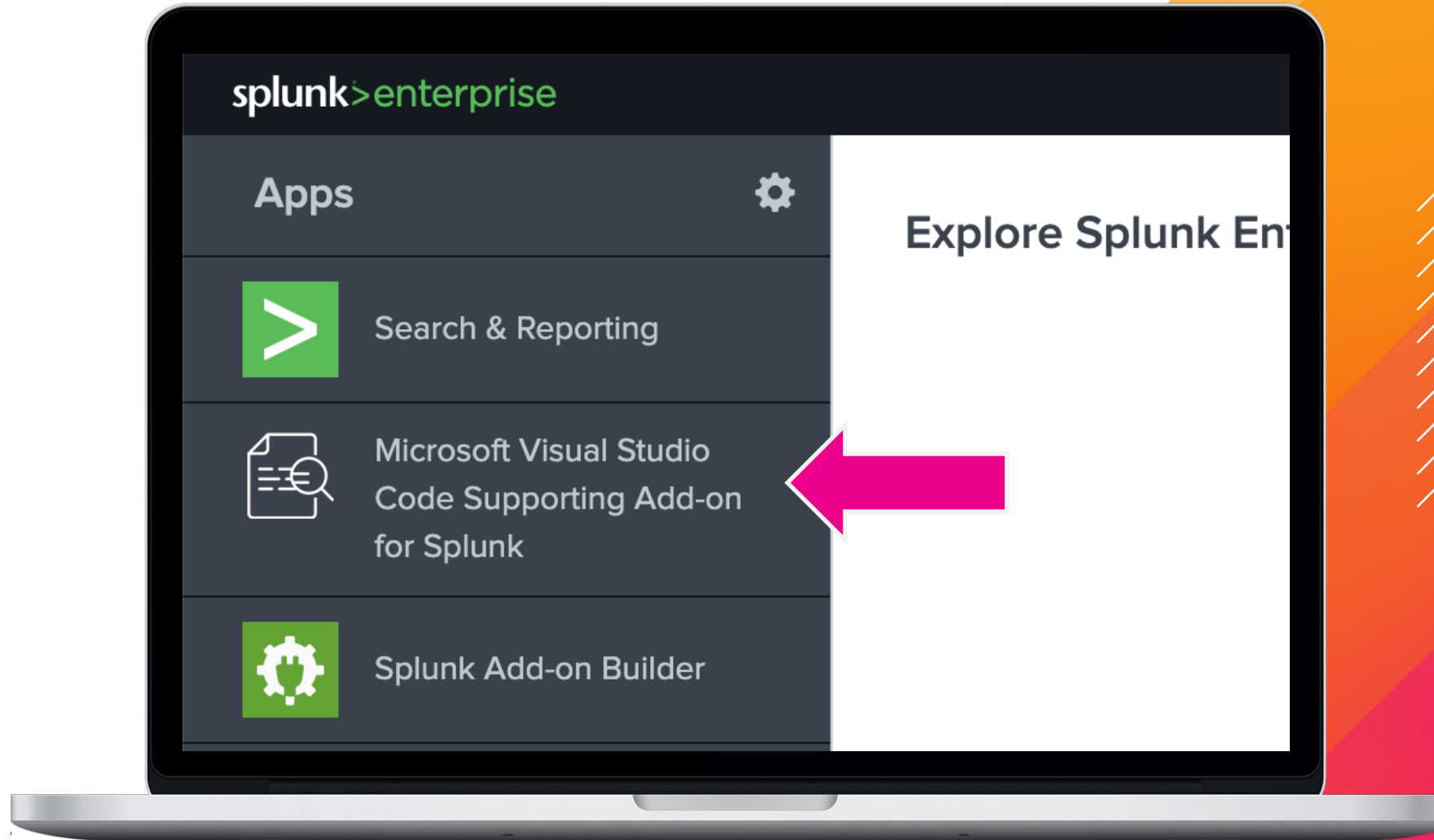
# Full-Featured Debugging is a Game Changer!

- Familiar experience
- Pause code execution on Splunk
- Control code execution in real time
- Inspect variables as they change



# Step 1 – Install

## Microsoft Visual Studio Code Supporting Add-on for Splunk.



## Step 2 - Modify

**Add 4 Lines  
of code to  
your Python  
file.**

```
port time
port datetime
port splunk.entity

validate_input(helper, definition):
    pass

collect_events(helper, ew):

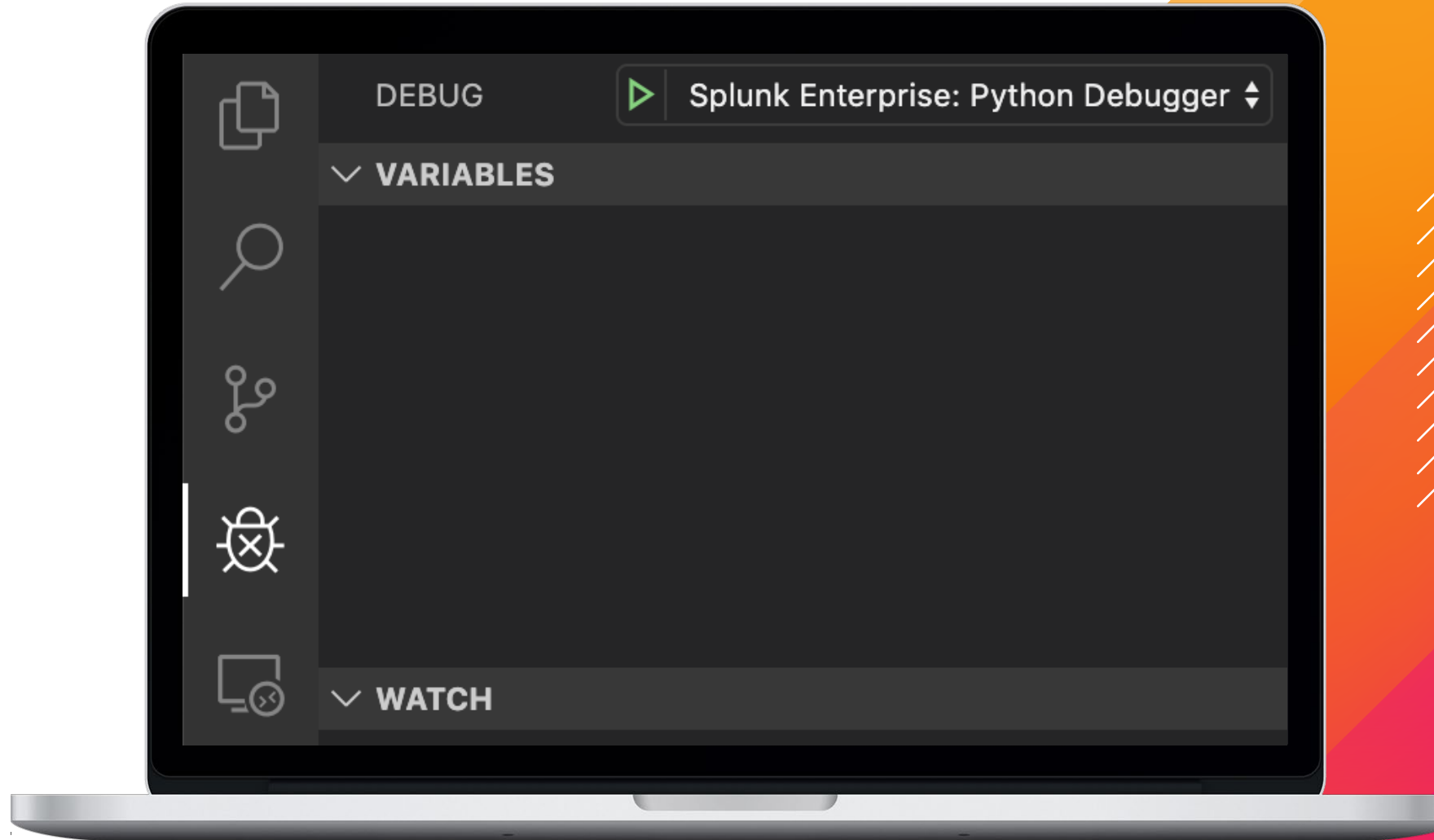
import sys, os
sys.path.append(os.path.join(os.environ['SPLUNK_HOME'], 'etc', 'apps', 'SA-VSCode', 'bin'))
import splunk_debug as dbg
dbg.enable_debugging(timeout=25)

app_version = "undefined"

if 'session_key' in helper.context_meta:
    session_key = helper.context_meta["session_key"]
    entity = splunk.entity.getEntity('/configs/conf-app', 'launcher', namespace=helper.c
    app_version = entity.get('version')
```

## Step 3 – Debug

**Open your folder in Visual Studio Code and start debugging.**



# Resources

Get your hands dirty

<https://bit.ly/splunk-vscode> (Extension)

<https://splunkbase.splunk.com/app/4801/> (VS Code Supporting Add-on)

<https://github.com/splunk/vscode-extension-splunk/wiki> (Docs)

<https://splunkbase.splunk.com/app/2962/> (Add-on Builder)

<https://dev.splunk.com/>

