
MEN FROM MARS
WOMEN FROM VENUS
BOTH CAN CODE .NET IN JUPYTER
Ron Dagdag

STORY

Ron

- .NET Developer since 2005
- .NET Framework 2.0
- Uses .NET for AR and IoT applications
- .NET Core
- Startup - Brand new software

Leodette

- .NET Developer since 2003
- .NET Framework 1.0
- Maintain large enterprise applications
- .NET Framework
- Software that makes $$$

MVP Microsoft® Most Valuable Professional

Microsoft CERTIFIED AZURE DEVOPS ENGINEER EXPERT

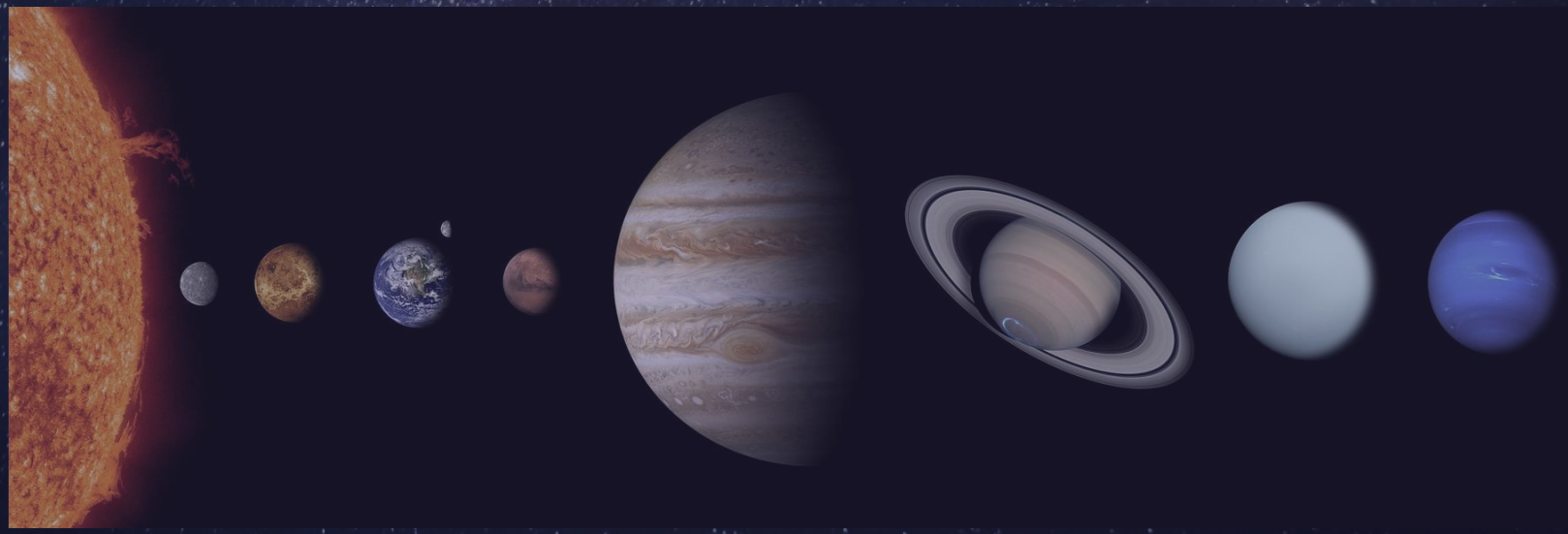
STORY

We both live in the same .NET Solar System in two different worlds

Then, we kept hearing there's another world out there

Jupyter and Data Science

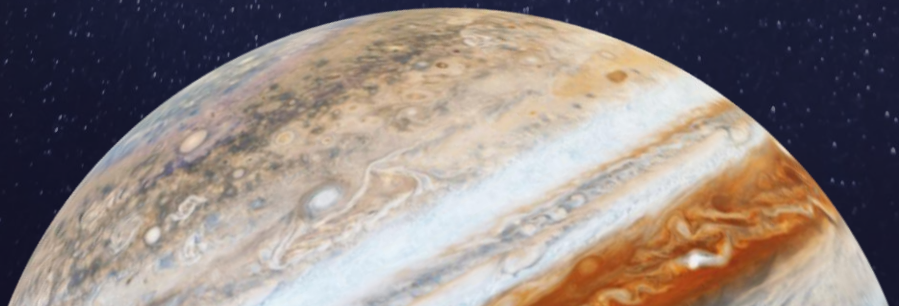
Pythonistas



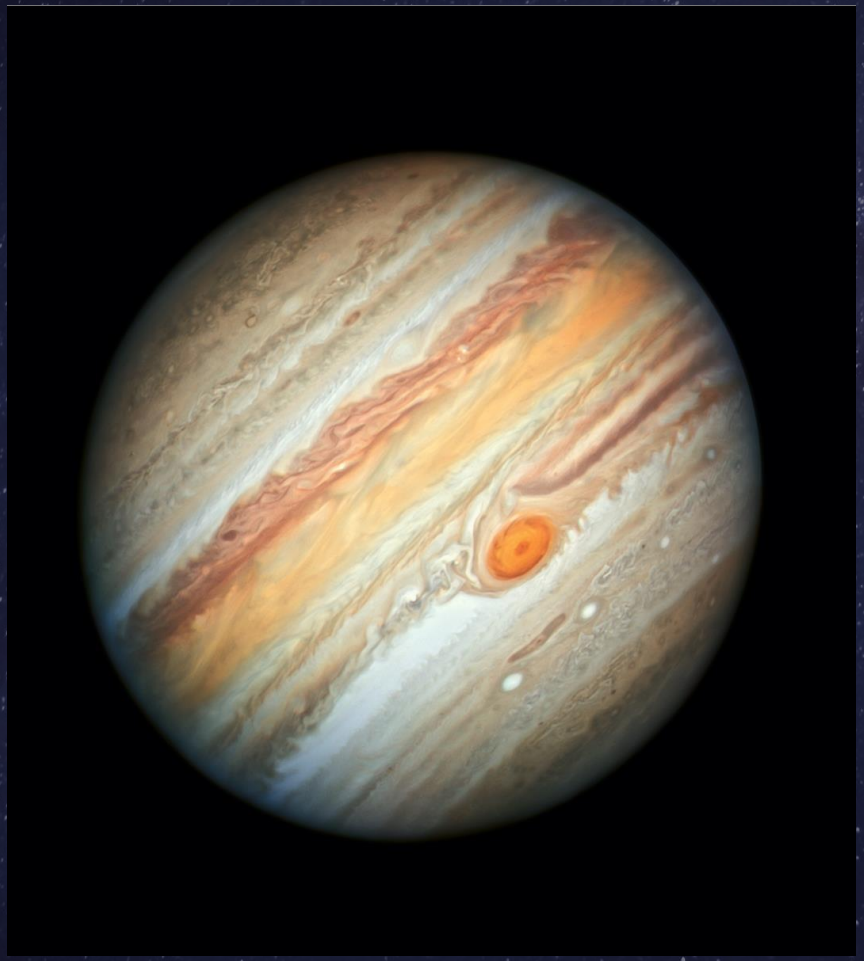
PYTHONISTA

AGENDA

- What is Jupyter?
- .NET Interactive
- .NET Jupyter Notebooks
- Raspberry PI
- Demo

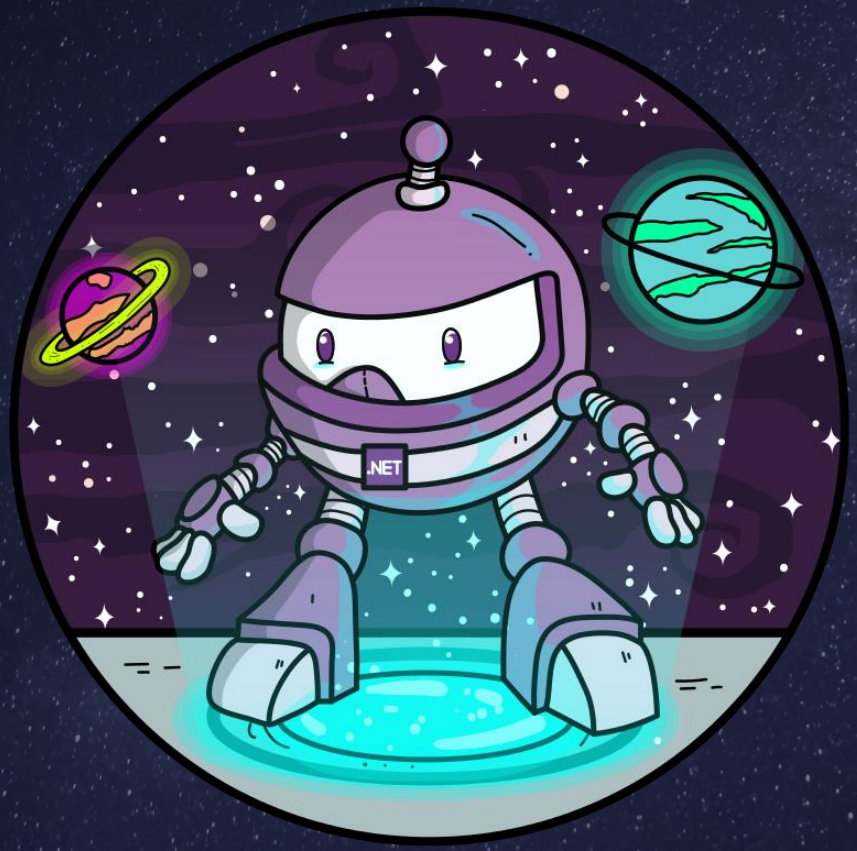


JUPYTER



- open-source web application since 2015
- create and share documents that contain
  - Live code
  - Equations
  - Visualizations
  - Narrative text.
- interactive data science & scientific computing
- Julia, Python and R
- (IPython Notebooks)

.NET INTERACTIVE



.NET into interactive experiences

- Jupyter, nteract, Visual Studio Code

Share code, explore data, write, and learn across your apps

.NET IN JUPYTER NOTEBOOKS

- Kernels
  - Python, R
  - .NET (C#), .NET (F#)
  - Powershell
- Magic Commands
  - #!lsmagic
- PocketView
  - Display HTML
- Xplot (data visualization library)
  - Prints text, html, svg, charts

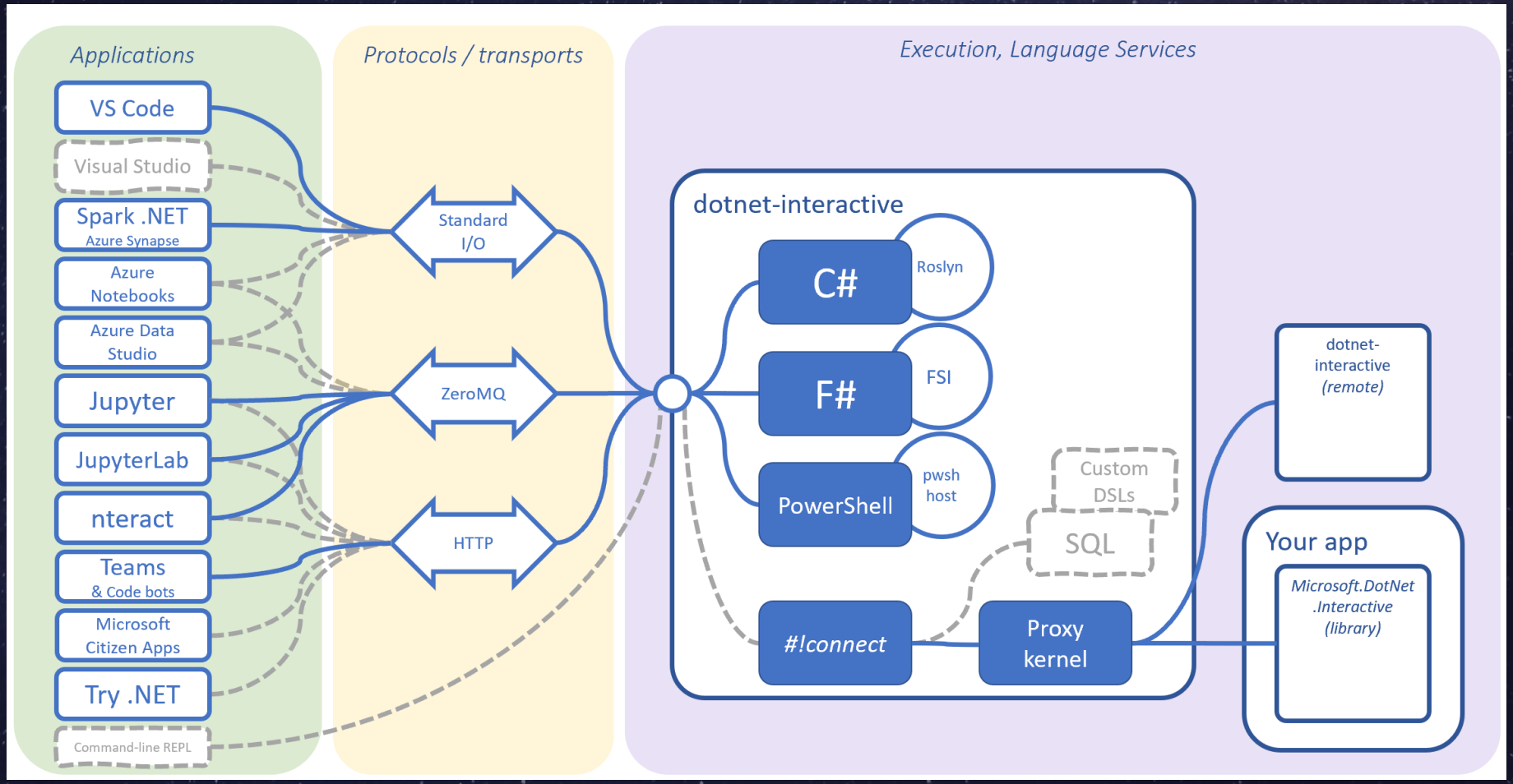
AZURE DATA STUDIO

- Jupyter Notebooks
- Use .NET Interactive Kernel
  - Powershell
  - C#
  - F#

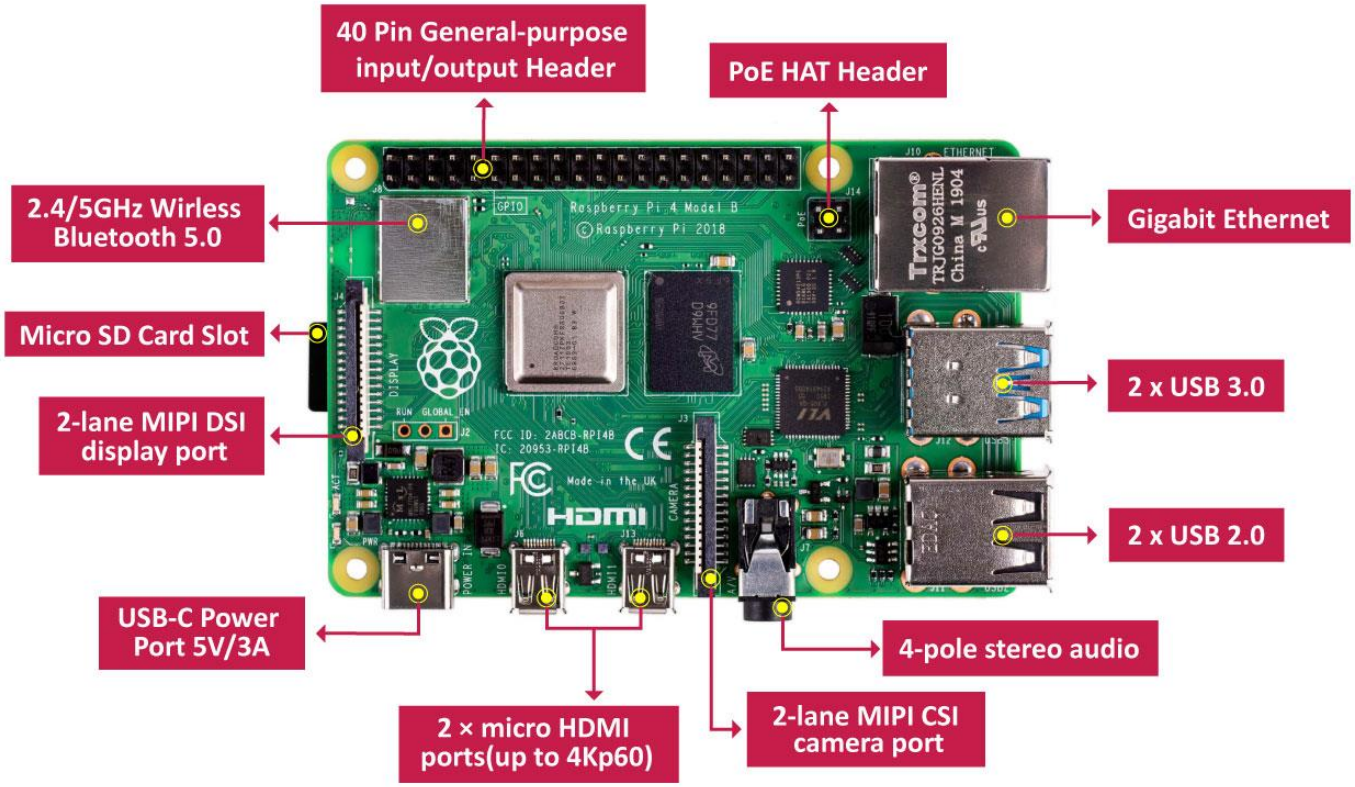
VISUAL STUDIO CODE

- Jupyter Notebooks
- .NET Interactive Notebooks extension
- Convert existing Jupyter notebook to a .NET Interactive Notebook
- File extension: *.dib

.NET INTERACTIVE



RASPBERRY PI



SENSE HAT


Raspberry Pi
Raspberry Pi
Sense HAT
element14
element14
DESIGNED BY:
IMPORTED & DISTRIBUTED BY:
www.element14.com

RASPBERRY PI

To install in raspberry pi

```
pi@raspberrypi:~ curl -L https://raw.githubusercontent.com/rondagdag/dotnetcode-jupyter-talk/master/setup-device.sh | bash -e
pi@raspberrypi:~ source .jupyter_venv/bin/activate
pi@raspberrypi:~ jupyter lab --no-browser
```

go to a browser and open jupyter lab http://192.168.1.45:8888/lab

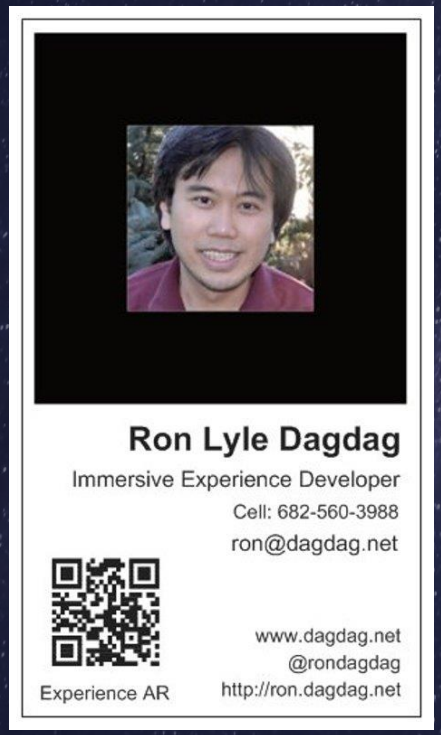
Rasperry Pi Sense Hat installation instructions https://www.raspberrypi.org/documentation/hardware/sense-hat/

PRESENTATION MATERIALS

https://github.com/rondagdag/dotnetcode-jupyter-talk

ABOUT ME

RON DAGDAG



- Lead Software Engineer / AI Edge Specialist
- 4th year Microsoft MVP awardee
- Personal Projects
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- Feedback appreciated, help improve my presentation skills