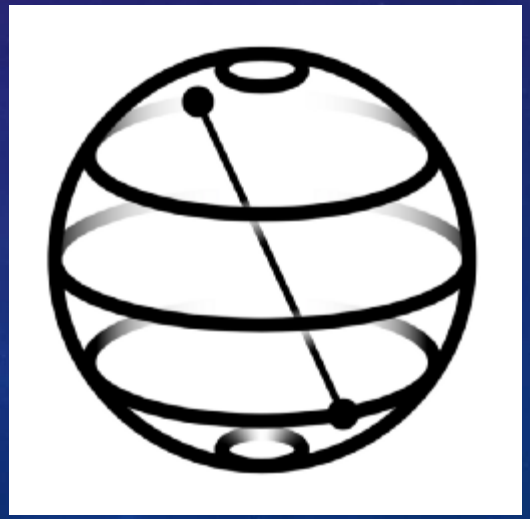
GETTING STARTED USING QISKIT



RANDY DOMER

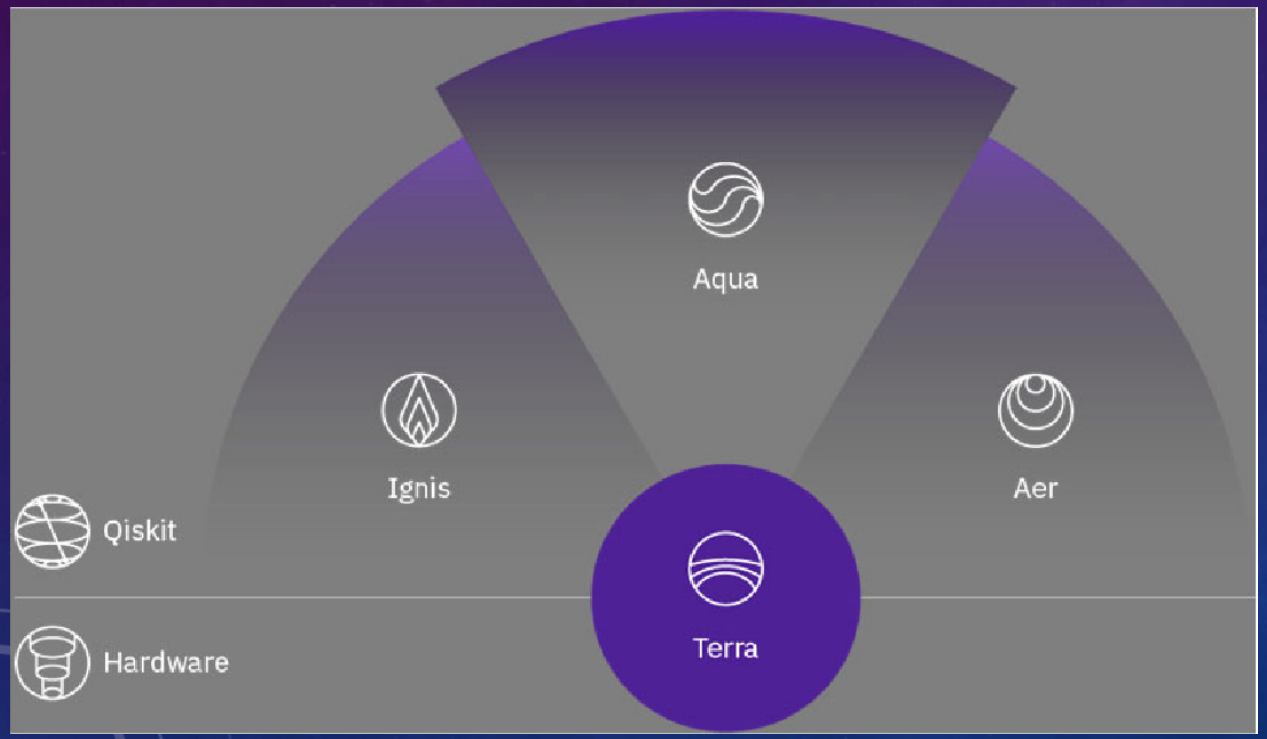
MY BACKGROUND

- Application developers for 30+ Years in the health insurance industry
- Multiple development languages – the usual suspects
- Not an IBM spokesman – very much agnostic

WHAT IS QISKIT?

- Qiskit is IBM implementation of Quantum Computing Platform
- Qiskit is open source
- Written in Python
- Is made up of four difference components
- Can use the IBM Quantum Computing Platform

QISKIT = IBM QC PLATFORM



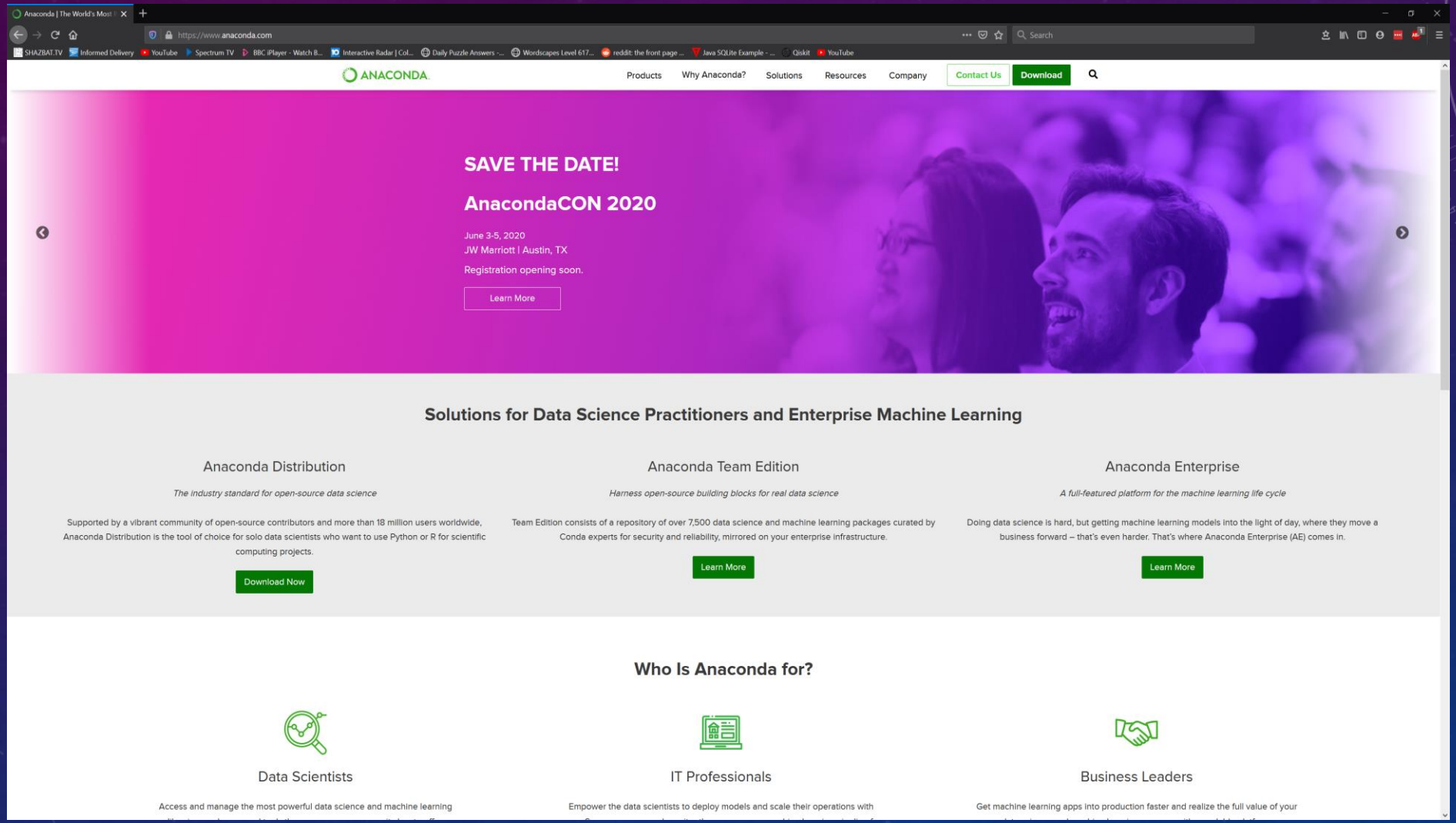
- Terra: Composing programs using circuits and pulses
- Aqua: Building algorithms and applications
- Aer: Simulators, emulators and debugging
- Ignis: Addressing errors and noise

Installing Qiskit

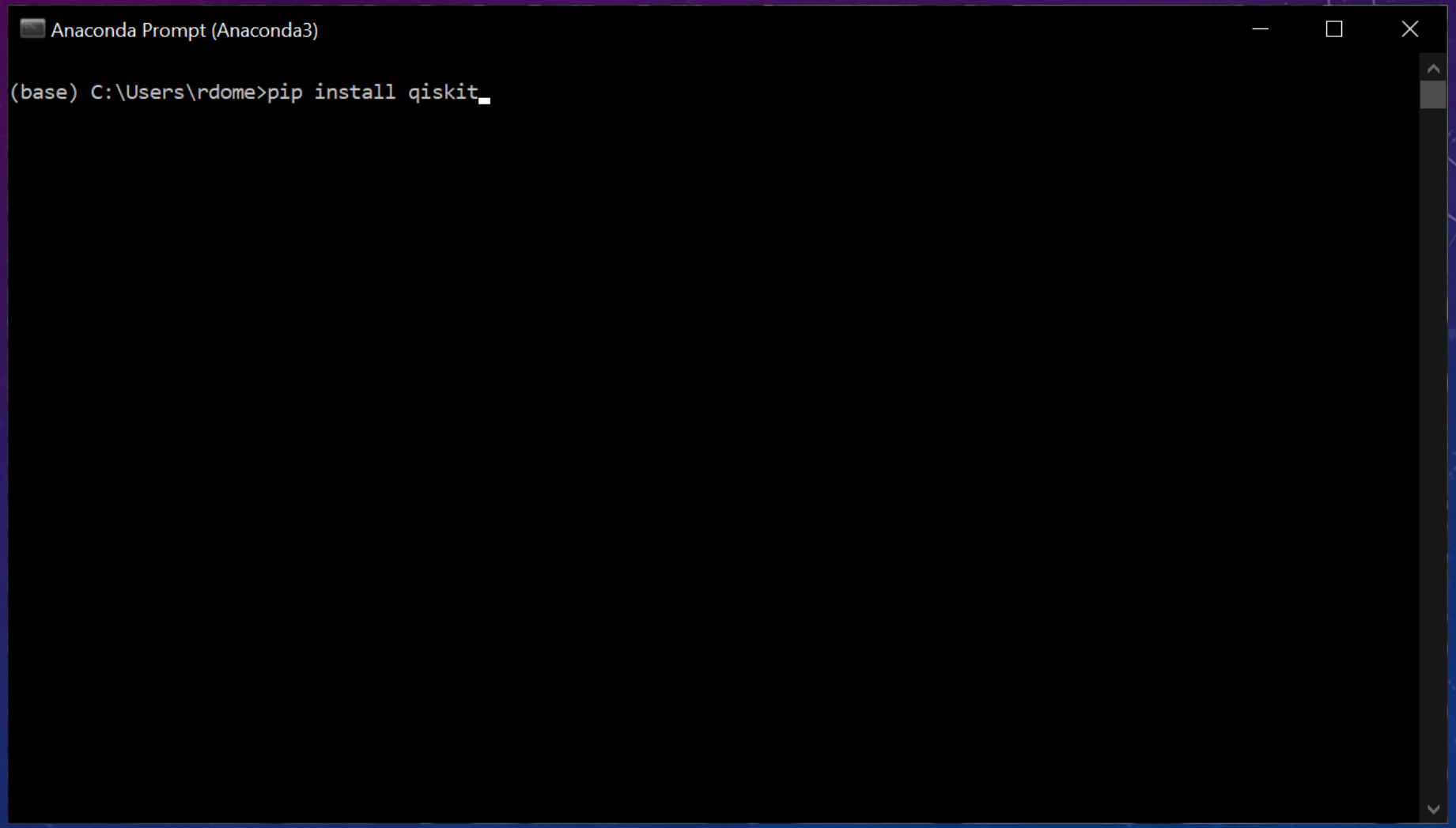
Prerequisites

- Need Python 3.x installed
- Use Anaconda to load python libraries
- Use Juniper Notebooks to test
- Works on all platforms: Windows, Mac and Linux

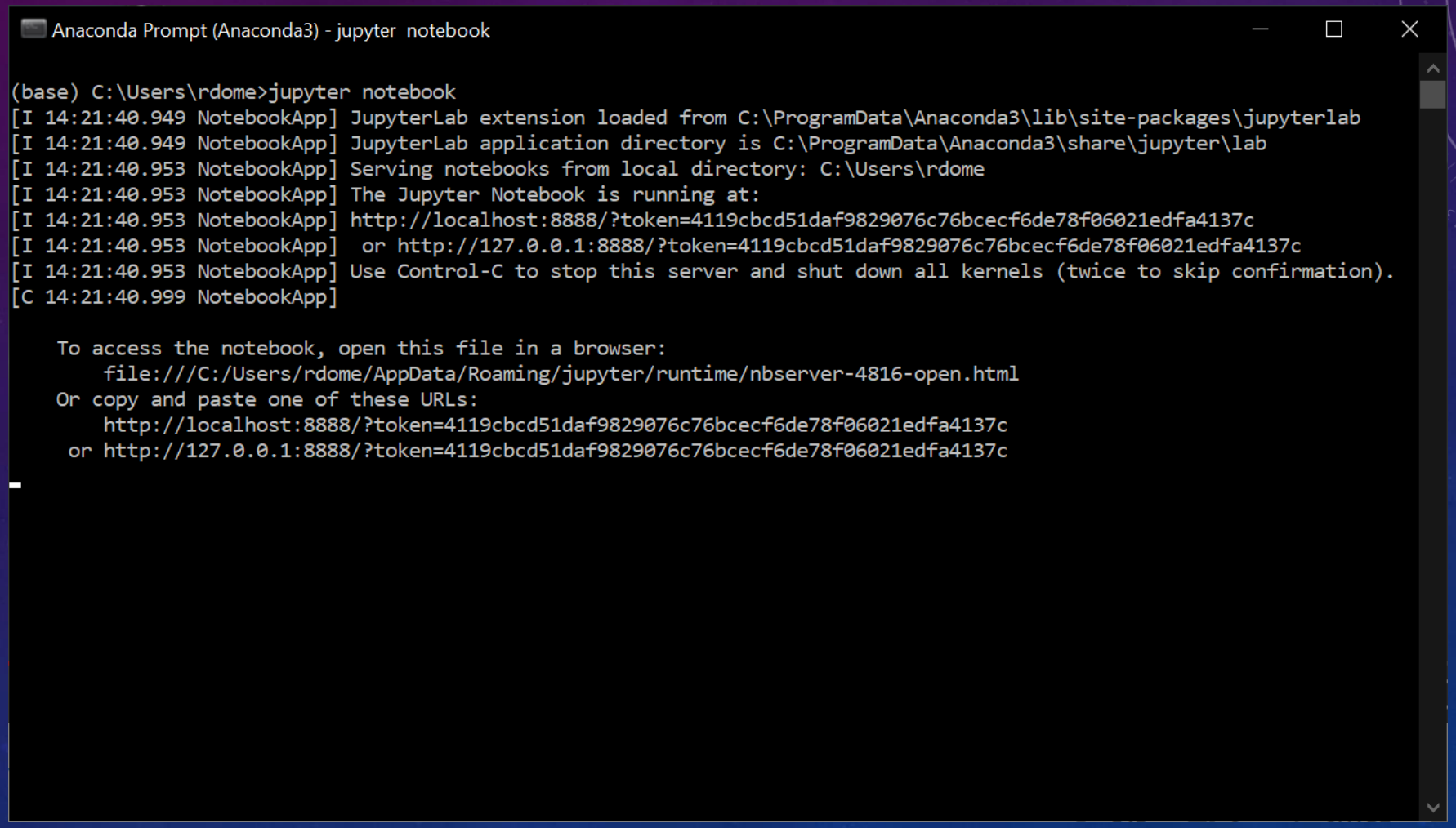
Install Anaconda



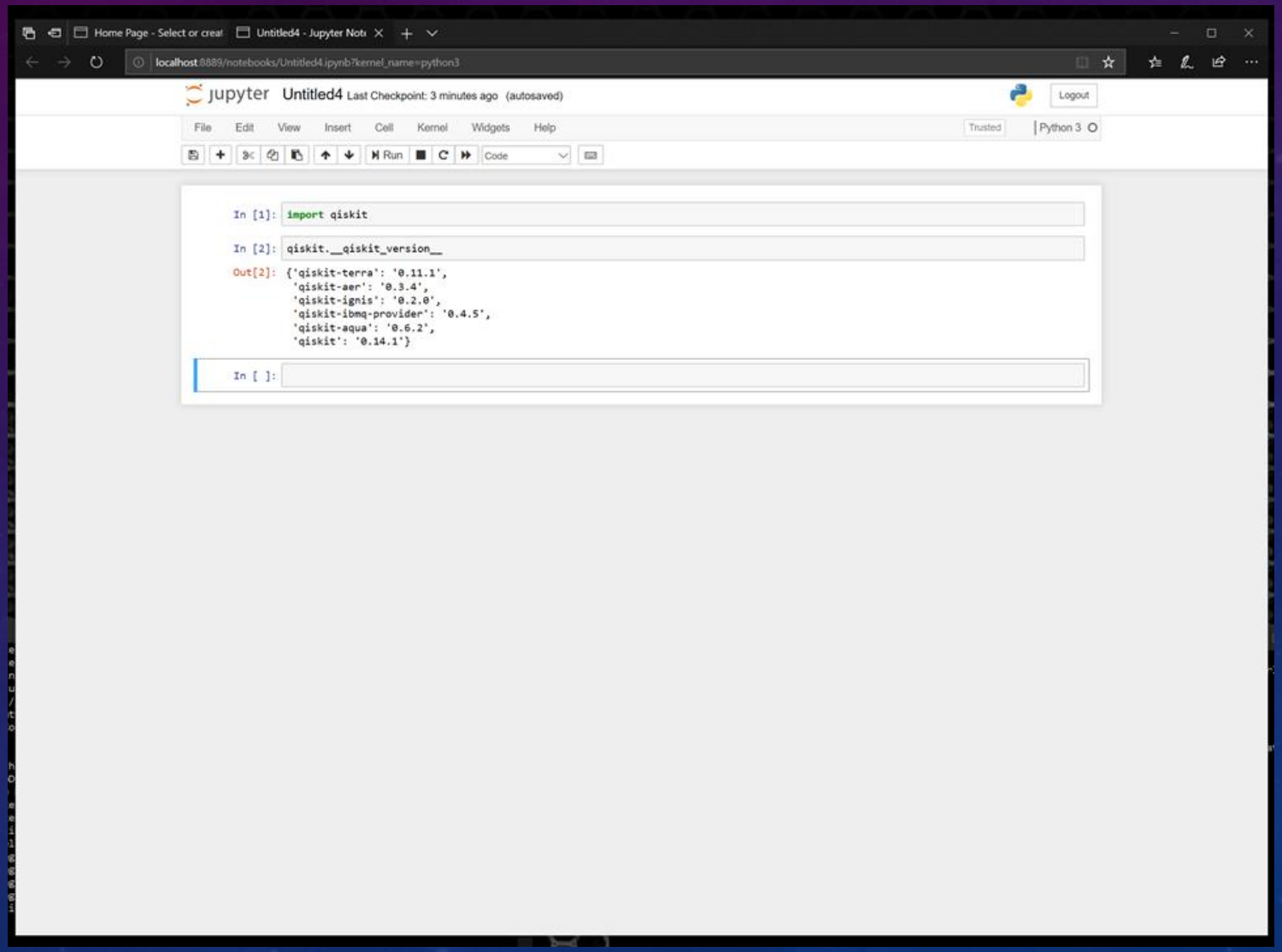
Install Qiskit



Run Jupyter Notebook

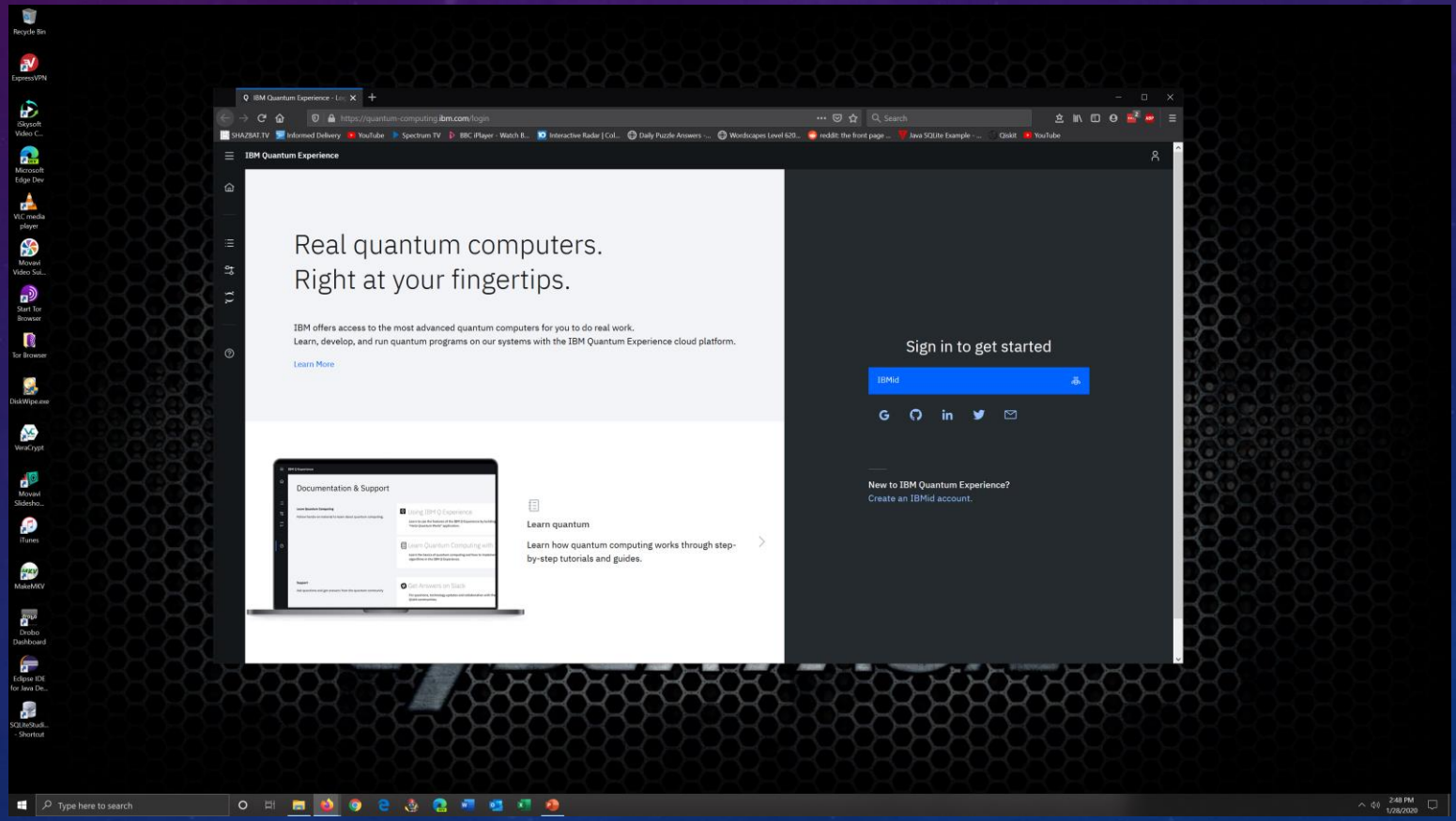


Test Qiskit install and check version

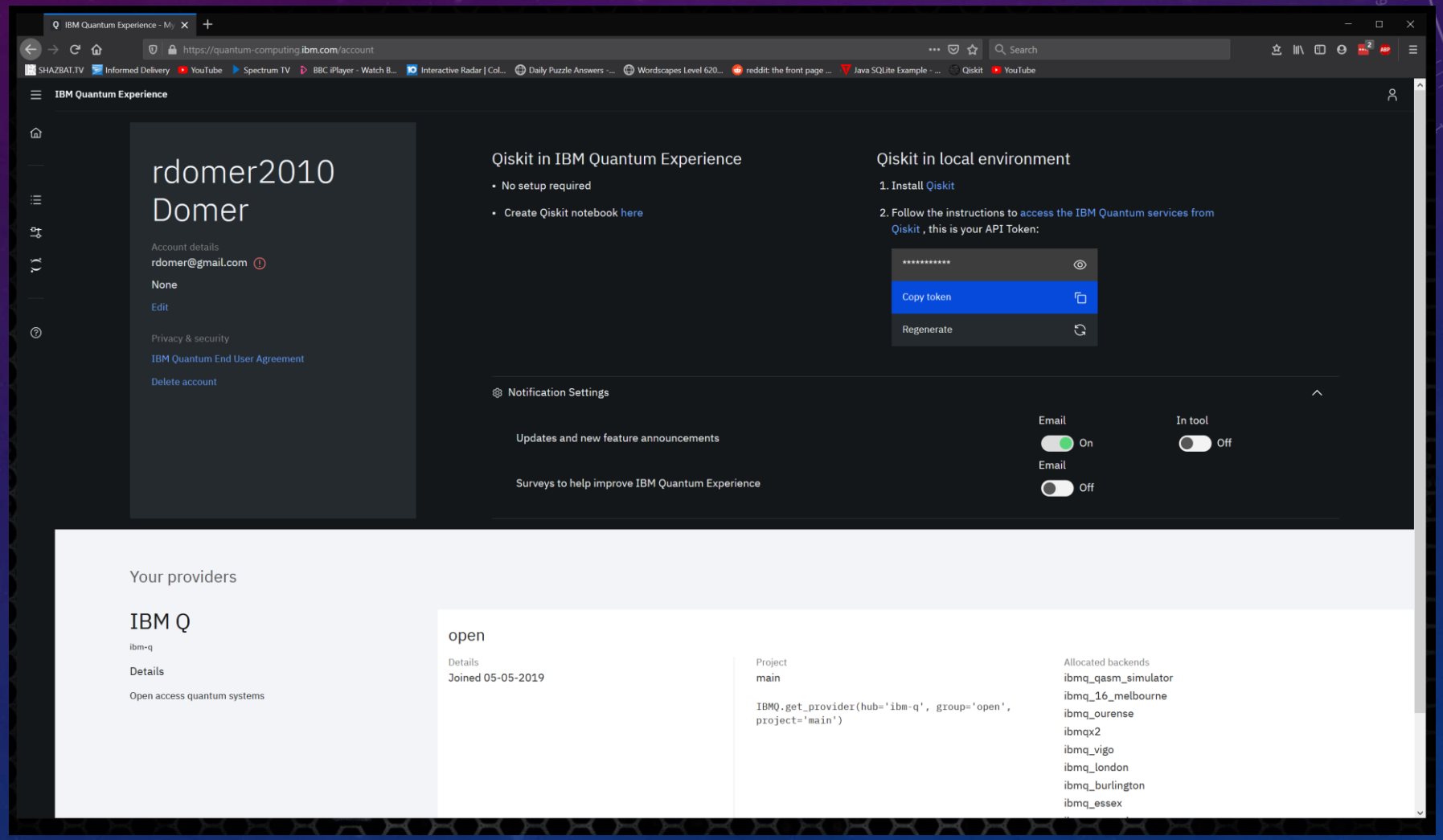


Now register with IBM Quantum Experience

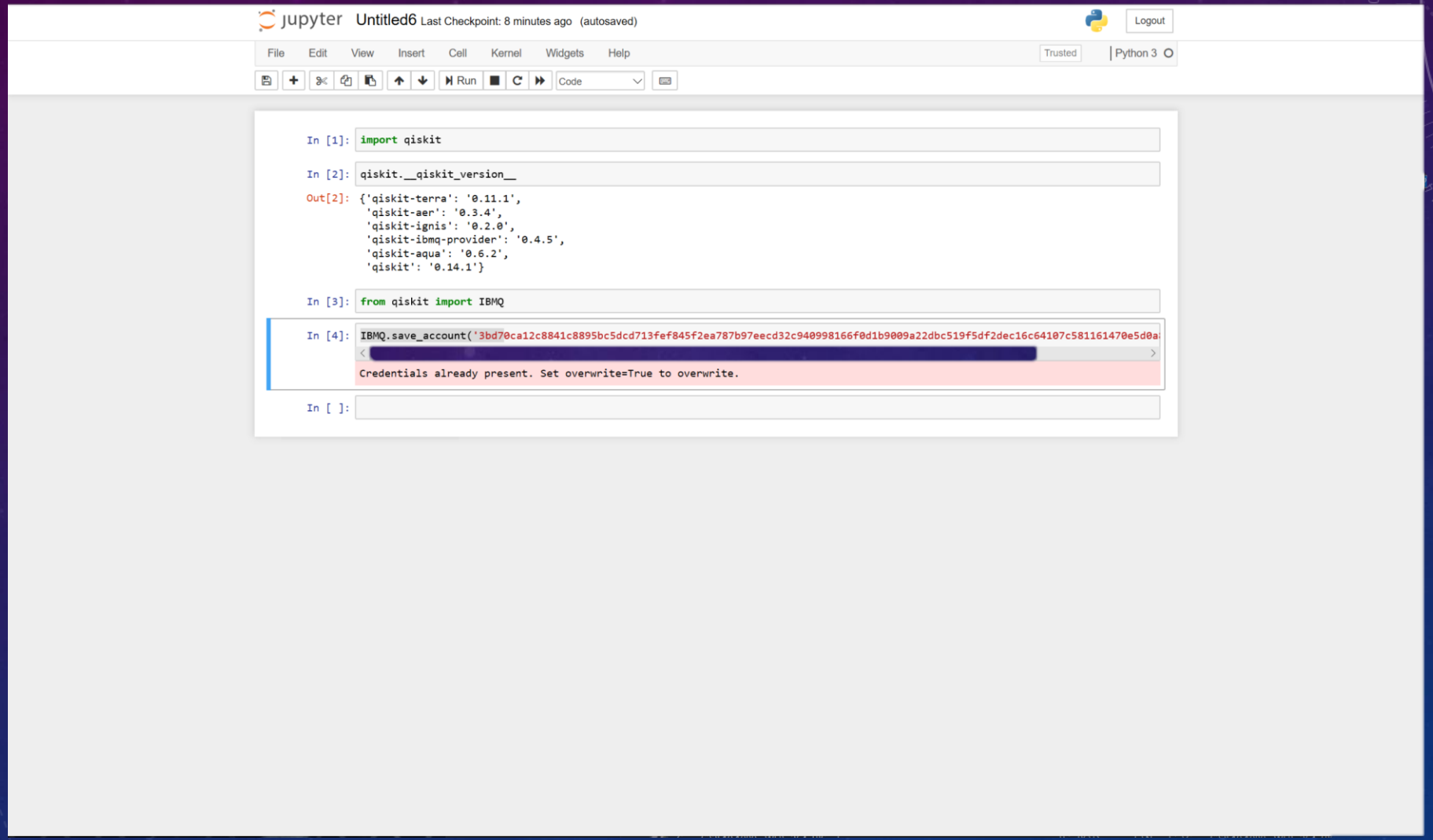
If you need to register with IBM Quantum Experience to run your program on an actual Quantum Computer **https://quantum-computing.ibm.com/login**



Once you have registered with IBM Quantum you will need to request a token



Load Token into your Qiskit



Congratulations – you are ready to take the next step

New Textbook on Qiskit: https://qiskit.org/textbook/preface.html

Hello World Tutorial: https://www.youtube.com/watch?v=RrUTwq5jKM4

IBM has a great series of YouTube videos on how to create programs

There is several quantum games being developed!