Link to huge repo of updated resources: https://github.com/desireevl/awesome-quantum-computing

Resources:

1. **Quantum Challenge Fall 2020 Notebooks:** https://github.com/qiskit-community/IBMQuantumChallenge2020

2. **Qiskit Textbook:** https://qiskit.org/textbook/preface.html

3. **QCHack 2020 Stanford and Yale Bootcamp:** https://www.twitch.tv/quantumcoalition

4. **Repository of all Qiskit Community Tutorial Jupyter notebooks (This should be a great starting point for a course roadmap) :** https://github.com/qiskit-community/qiskit-community-tutorials

5. **Q-Munity Quantum Algorithm Tutorials notebook style:** https://www.qmunity.tech/tutorials

6. **Microsofts Quantum Computing take: Quantum Katas and Introductory course**: https://docs.microsoft.com/en-us/learn/paths/quantum-computing-fundamentals/ and https://github.com/microsoft/QuantumKatas

7. **Quantum Country by by Andy Matuschak and Michael Nielsen**: https://quantum.country/

8. **The Quantum Atlas (Do check out their awesome audio and visual portrayal on each of their topic!)** https://quantumatlas.umd.edu/

Youtube Playlists of Courses :

1. **Qiskit Global Summer School 2020 Playlist (An awesome course that has touched variety of applications in Quantum Computing):** https://www.youtube.com/playlist?list=PLOFEBzvs-VvrXTMy5Y2IqmSaUjfnhvBHR

2. **Lecture Notes, Links, Jupyter Notebooks of Qiskit Global Summer School 2020:** https://qiskit.org/learn/intro-qc-qh/

3. **Ph CS 219A John Preskill:** https://www.youtube.com/playlist?list=PL0ojjrEqIyPy-1RRD8cTD_lF1hflo89Iu

4. **Berkeley edX course CS191x "Quantum Mechanics and Quantum Computation by Dr. Umesh Vazirani :** https://www.youtube.com/playlist?list=PLDAjb_zu5aoFazE31_8yT0OfzsTcmvAVg

5. **Quantum Machine Learning MOOC, created by Late Peter Wittek from the University of Toronto in Spring**

2019: https://www.youtube.com/playlist?list=PLmRxgFnCIhaMgvot-Xuym_hn69lmzIokg

6. **CERN: A Practical Introduction to Quantum Computing:** https://www.youtube.com/playlist?list=PLDbZuXfj6Ydn-Ei39DHVEYBZx0glMLRCw

7. **QIP 2021 Talks list :** https://www.youtube.com/playlist?list=PL5DZ45amUsqIaqE9EIemfc9LzeWzXnGY_

Courses:

1. **Coursera: Introduction to Quantum Computing by Saint Petersburg State University (May drive beginners away! But is really rigourous and has a math heavy approach) :** https://www.coursera.org/learn/quantum-computing-algorithms

2. **Coursera: Quantum Computing. Less Formulas. More Understanding by Saint Petersburg State University :**https://www.coursera.org/learn/quantum-computing-lfmu

3. **Coursera: Physical Basics of Quantum Computing by Saint Petersburg State University :** https://www.coursera.org/learn/physical-basis-quantum-computing

4. **edX: Micromasters Program in Quantum Technologies: Computing by Purdue University:** https://www.edx.org/micromasters/purduex-quantum-technology-computing

5. **edX: Quantum 101: Quantum Computing & Quantum Internet by TUDelft (Personally have not tried this as a certification since it was too expensive for me but I have seen the material and found it really good) :** https://www.edx.org/professional-certificate/delftx-quantum-computing-and-quantum-internet

6. **QubitxQubit 2020-2021 Introduction to Quantum Computing Course with IBM Quantum :** https://www.qubitbyqubit.org/programs

Visualisation Tools/Games:

1. **IBM Quantum Experience:** https://quantum-computing.ibm.com/

2. **Qiskit Blocks (Minecraft version of QC):** https://github.com/JavaFXpert/QiskitBlocks

3. **Hello Quantum Game - IBM: Google Play:** https://play.google.com/store/apps/details?id=com.ibm.research.helloquantum

4. **Quirk, drag-and-drop quantum circuit simulator for quick circuits** https://algassert.com/quirk#circuit

5. **Qiskit Visualization codes (Doc list of codes that you can add in your qiskit python notebook anytime to get certain visualization elements in code):** https://qiskit.org/documentation/apidoc/visualization.html

6. **The Quantum Atlas:** https://quantumatlas.umd.edu/

7. **qBraid :** https://qbraid.com/