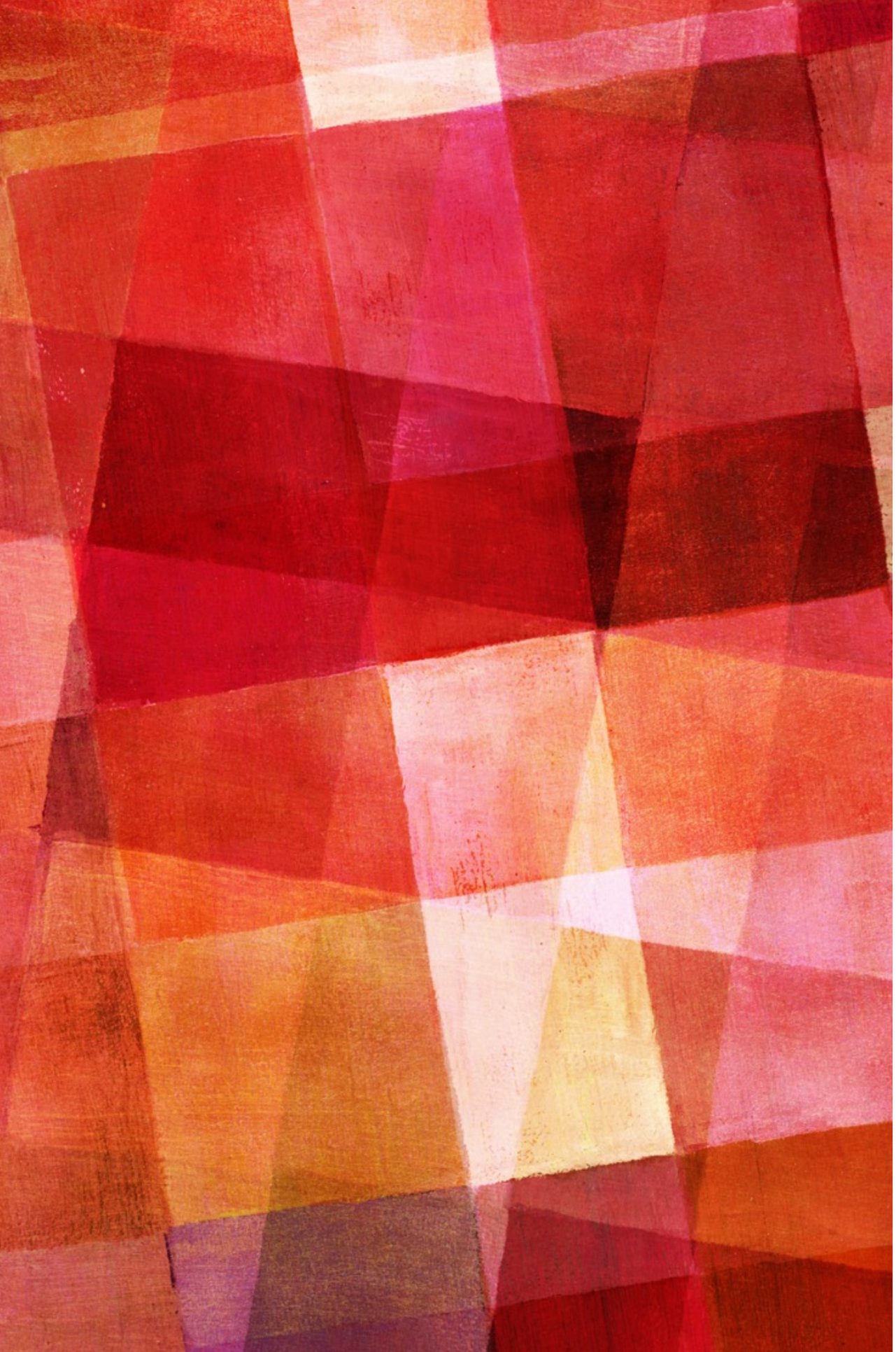
PYTHON LEARNING RESOURCES

Theory and Practice



THREE MAIN PARTS

- Python syntax
- Algorithms
- Practice

LEARNING PYTHON SYNTAX

- edX.org and MIT Open Courseware, **"Introduction to Computer Science and Programming Using Python"** by MIT
  - https://www.edx.org/course/introduction-computer-science-mitx-6-00-1x-10
  - https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-0001-introduction-to-computer-science-and-programming-in-python-fall-2016/
- **Official documentation**: https://docs.python.org
- **Free books**: http://pythonbooks.revolunet.com/
- **Code visualizer**: http://www.pythontutor.com/
- **30 Days of Code** on HackerRank.com

LEARNING ALGORITHMS AND PROBLEM SOLVING

- coursera.org: **Algorithms Specialization** by Stanford (in pseudocode; you can audit the courses for free!)
- Free book: Dasgupta, Papadimitriou, and Vazirani, **Algorithms** (in pseudocode)
- **Practice & competitions**: TopCoder, HackerRank, CodeForces

- Also: B. Miller & D. Ranum, Problem Solving with Algorithms and Data Structures using Python on http://pythonbooks.revolunet.com/

PRACTICE

- Paid internships:
  - **Outreachy** for women
  - **Google Summer of Code** for students
- **Open source 🤘 - you are welcome!**
  - Cadasta, Ceph, Debian, Fedora, GNOME, Mozilla, OpenStack, oVirt, QEMU, Wikimedia, …
  - Start by:
    - reading developer documentation
    - joining the organization's communication channels
    - solving "good-first-bugs" on bug tracker/GitHub issues

Email: bugzeeeeeee@gmail.com

Blog: https://medium.com/@bugzeeeeeee

These slides on GitHub:

https://github.com/owlishDeveloper/juniorsLibrary