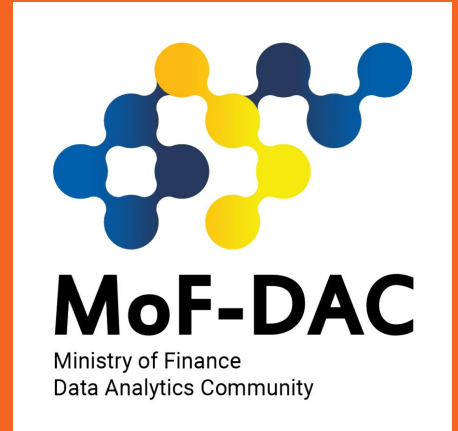

Introduction to Data Science with Python

Rahmat Safri Fikri
Sigit Sumarsono



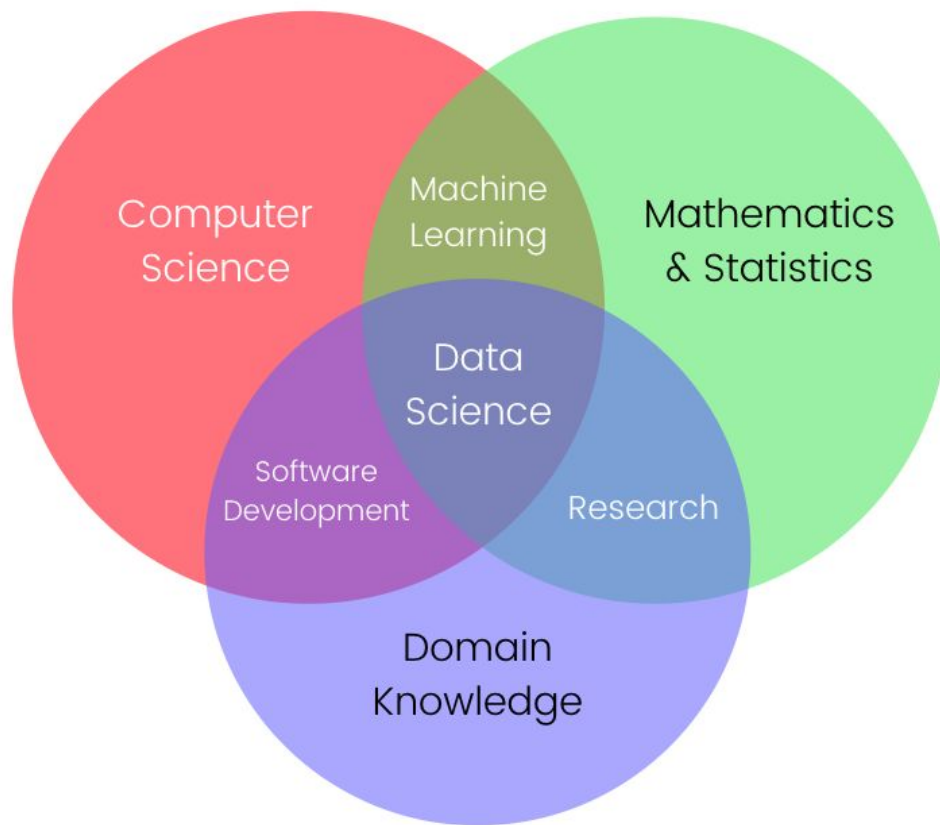
Prerequisites

Instalasi Anaconda:

<https://www.anaconda.com/products/individual#Downloads>

Anaconda Installers

Windows 	MacOS 	Linux 
Python 3.8	Python 3.8	Python 3.8
64-Bit Graphical Installer (477 MB)	64-Bit Graphical Installer (440 MB)	64-Bit (x86) Installer (544 MB)
32-Bit Graphical Installer (409 MB)	64-Bit Command Line Installer (433 MB)	64-Bit (Power8 and Power9) Installer (285 MB)
		64-Bit (AWS Graviton2 / ARM64) Installer (413 M)
		64-bit (Linux on IBM Z & LinuxONE) Installer (292 M)



KEBUTUHAN DATA ANALYTICS

- Bentuk Transparansi dan Akuntabilitas dimulai dari Data.
 - Sebagai bentuk pelayanan dan interaksi
 - Membuat pengalaman yang baik untuk digitalisasi layanan publik
 - Memberikan pemahaman yang baik terhadap kebutuhan stakeholder
 - Memitigasi risiko dalam organisasi
 - Mewujudkan *Data Driven Organization*
-

Best Practices of a Data Driven Organization

People

- Encouragement and enablement to be constantly learning
- Access to data by everyone in the organization
- Culture of collaboration

Process

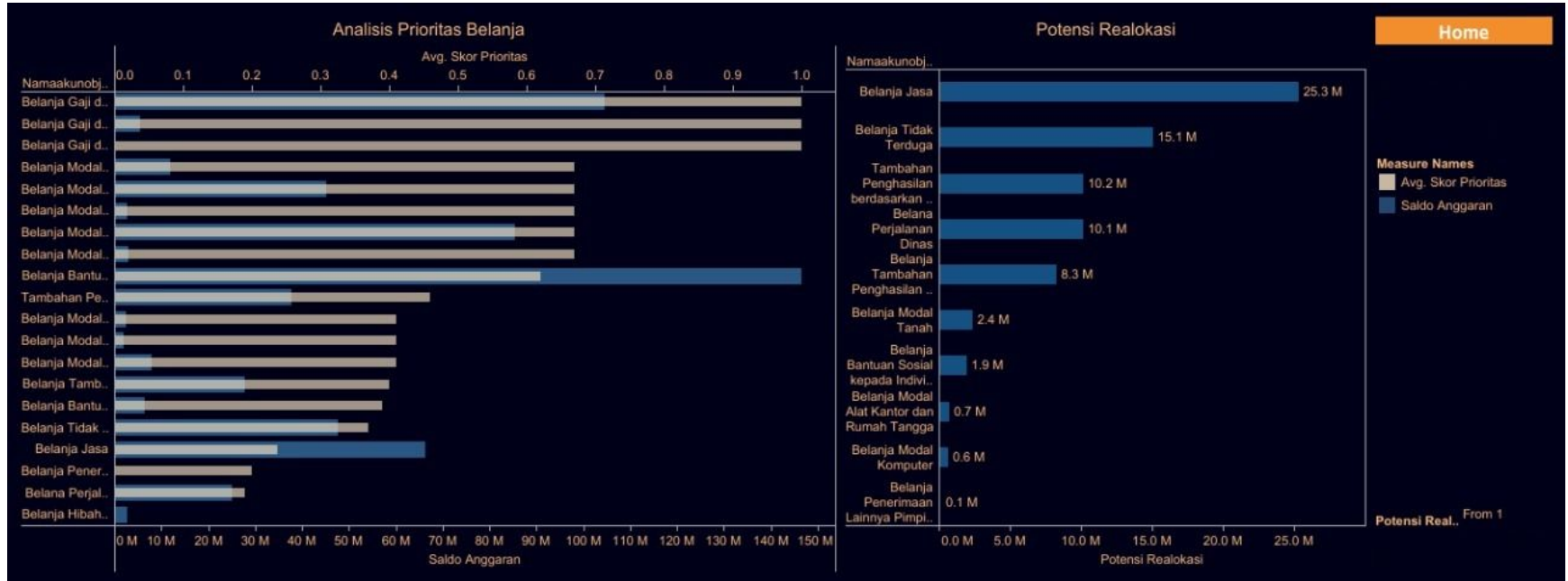
- Strong, consistent data governance
- Methods that encourage collaboration over top down decision making
- Encourage decisions to be data driven and not "from the gut"
- Focus on enablement and empowerment
- Organization wide knowledge of the value of data

Technology

- Self-service tools
- Automated data preparation and quality
- Scalable platforms that enable business units to deploy varying tools
- Unified meta data tracking

Model Financial Advisor:

Dapat memberikan rekomendasi besaran anggaran yg dapat direalokasi untuk mendukung penanganan pandemi Covid berdasarkan analisis prioritas belanja daerah.





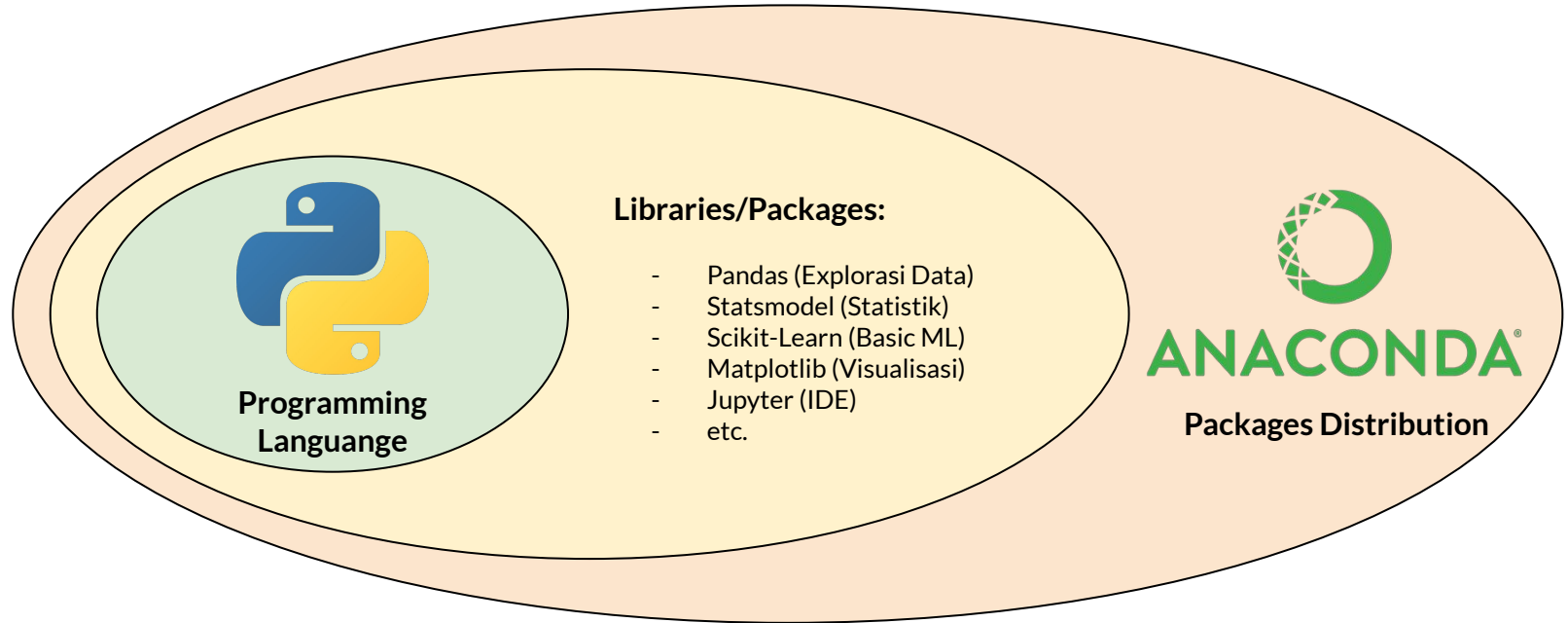
Berkenalan dengan Python



Mengapa Python?

1. **Simplicity:** syntax lebih mudah dibaca dan dipahami.
 2. **Scalability:** script, web, desktop, etc.
 3. **Libraries:** numPy, Pandas, Scikit-Learn, TensorFlow, Flask, etc.
 4. **Collaboration:** Jupyter Notebook, Google Collab, etc.
 5. **Community:** Salah satu Bahasa yang populer (Top3), terdokumentasi dengan baik di StackOverflow, Open Source.
 6. **Support:** Anaconda, VSCode, PyCharm, etc.
-

Memahami Lingkungan Data Science di Python*



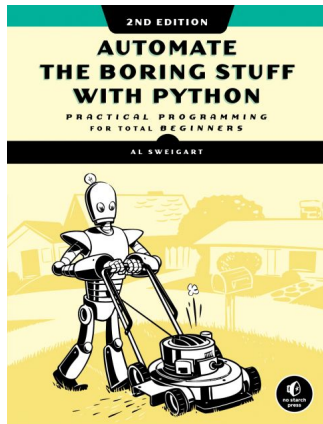
Langkah Cepat Memulai Lingkungan Data Science Python

Offline Path

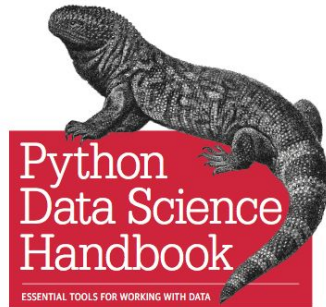
1. Install Anaconda (<https://www.anaconda.com>)
2. Start -> Anaconda Navigator
3. Pilih Jupyter Notebook

Online Path

- Google Colab (<https://colab.research.google.com>)
 - Kaggle(<https://www.kaggle.com>)
-



O'REILLY



Jake VanderPlas

Rekomendasi bacaan (gratis)*

Automate Boring Stuff with Python, *by Al Sweigart*

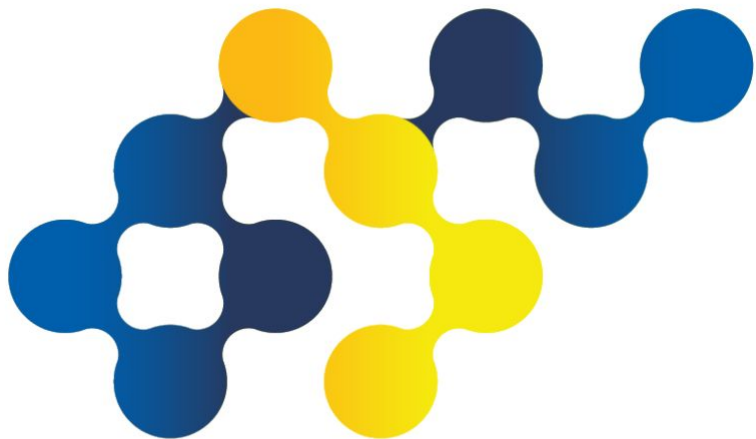
<https://automatetheboringstuff.com/>

Python Data Science Handbook, *by Jake VanderPlas*

<https://jakevdp.github.io/PythonDataScienceHandbook/>

W3School

<https://www.w3schools.com>



MoF-DAC

Ministry of Finance
Data Analytics Community

MoF-DAC

Ministry of Finance - Data Analytics Community
Komunitas Data Analytics Kementerian Keuangan

✉️ mofdac@kemenkeu.go.id

🔗 Youtube: MoF-DAC

📄 Membership: s.id/member-mofdac

📄 Materi: github.com/mofdac

mofdac.id

Terima Kasih

Ministry of Finance Data Analytics Community



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