

Praca z platformą Kubernetes

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26.04.2022

PUBLIC



Agenda



SAP Labs Poland

Różnorodność domen

E-commerce, social commerce, cloud platform, open source,...

Development: Go, Java, Angular, Cloud Native solutions, ...

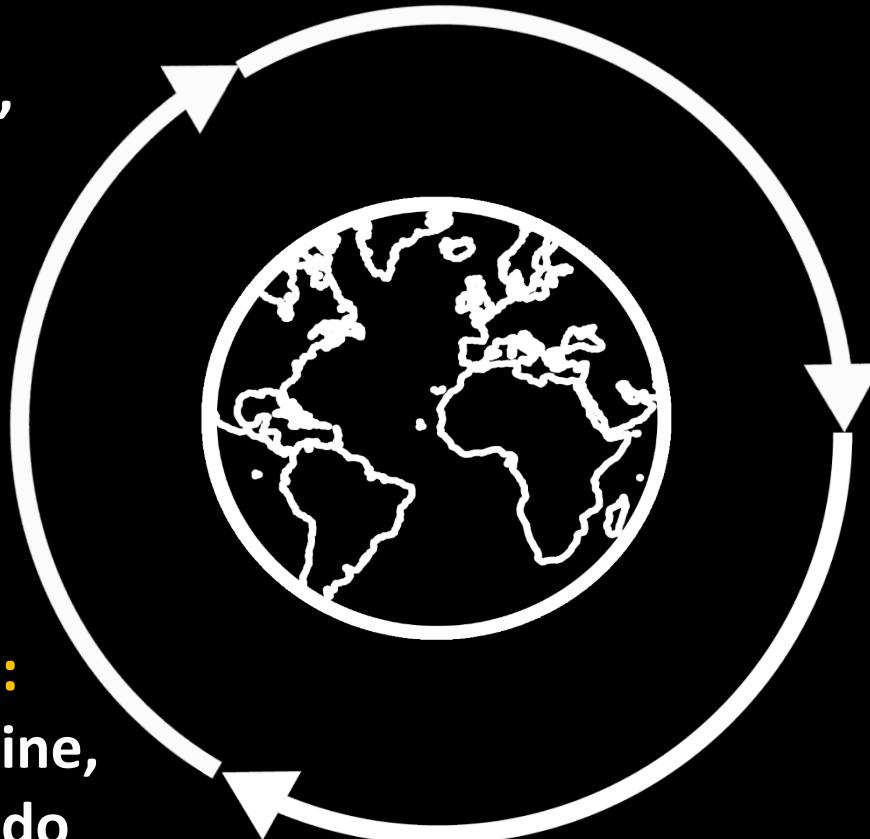
Możliwość nauki i rozwoju:

Platformy do edukacji on-line, certyfikacje, łatwy dostęp do ekspertów na całym świecie

> 350 pracowników

Różnorodność specjalizacji
Product teams, project teams, innovation projects teams, support teams

Jedno z 21 centrów SAP's Labs Network



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szczegóły!



SAP Labs Poland

12'22

MICHAŁ DRZEWIECKI,
JAN MĘDREK
**KICKSTART YOUR
CAREER - JAK DZIAŁA
PROGRAM STAŻOWY
TEAM HACK W
SAP LABS POLAND**

28'22

MICHAŁ DRZEWIECKI,
JAN MĘDREK
**TEAM HACK -
SPEED INTERVIEW**

26'22

WOJCIECH WRZALIK
**PRACA Z
PLATFORMĄ
KUBERNETES**

01'22

DOMINIKA BIEG,
ŁUKASZ ŁUCZYNOWICZ
**SCRUM MASTER -
CZYLI KTO?**

Goal

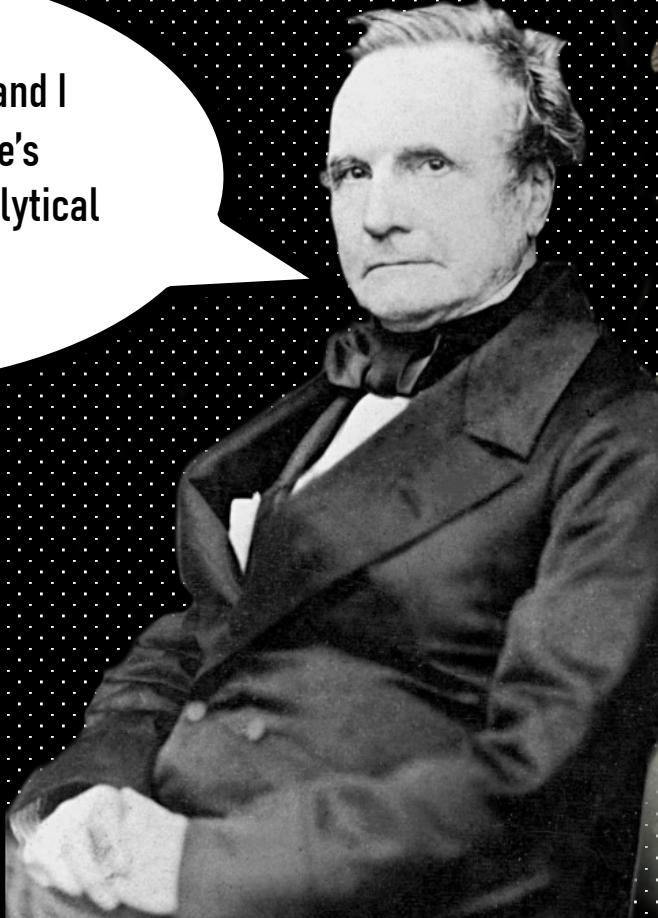
- Basic information about Kubernetes
- Inspired by Kubernetes docs
- Useful for Hack Team

Presumptions

- Kubectl installed
- Docker & k3d
- Helm
- Bash

Git

https://github.com/HackYourCareer/202204_working-with-kubernetes.git

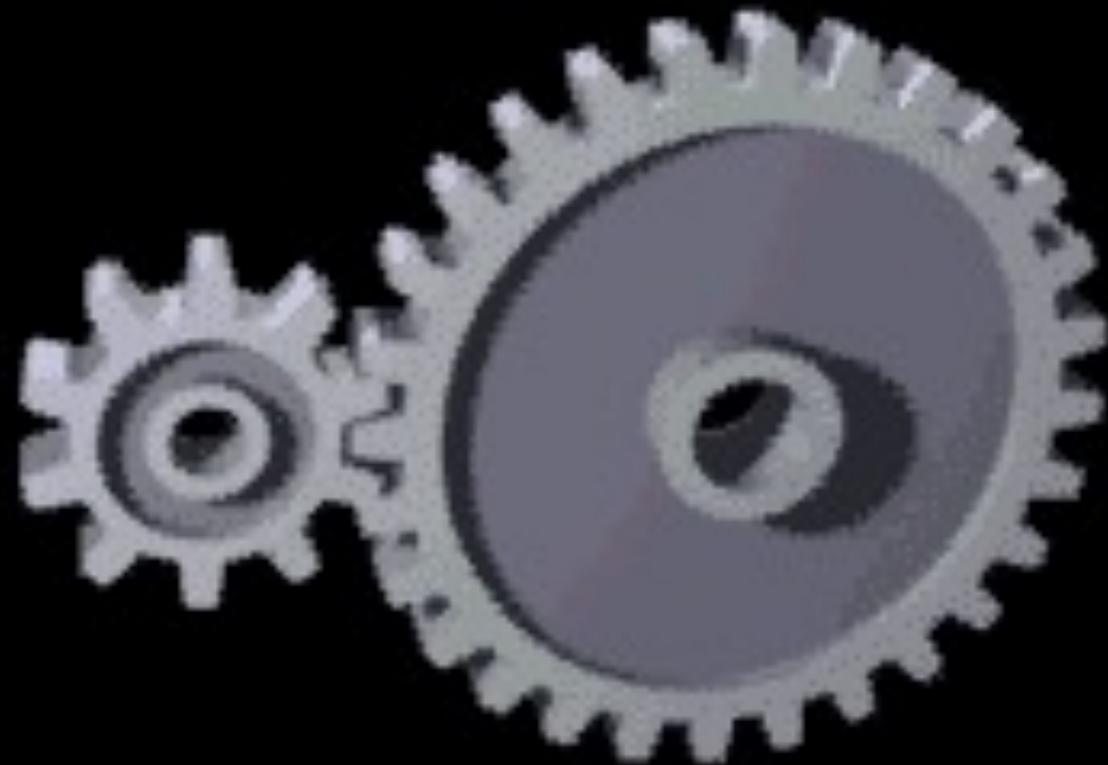


I am Charles Babbage and I
have created Babbage's
Difference Engine an Analytical
Engine.



I am Ada Lovelace – first
programmer and contributor to
Analytical Engine.

Difference Machine



https://www.youtube.com/watch?v=vdra5Ms__9s

Analitical Engine

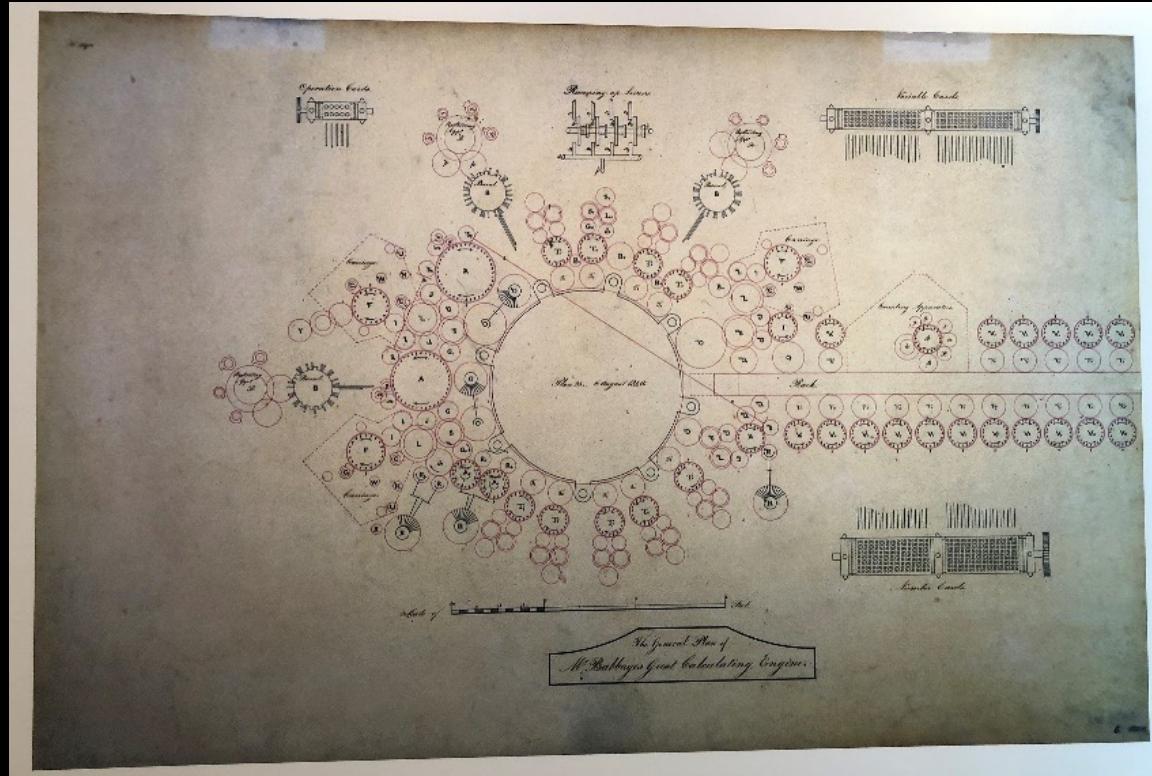
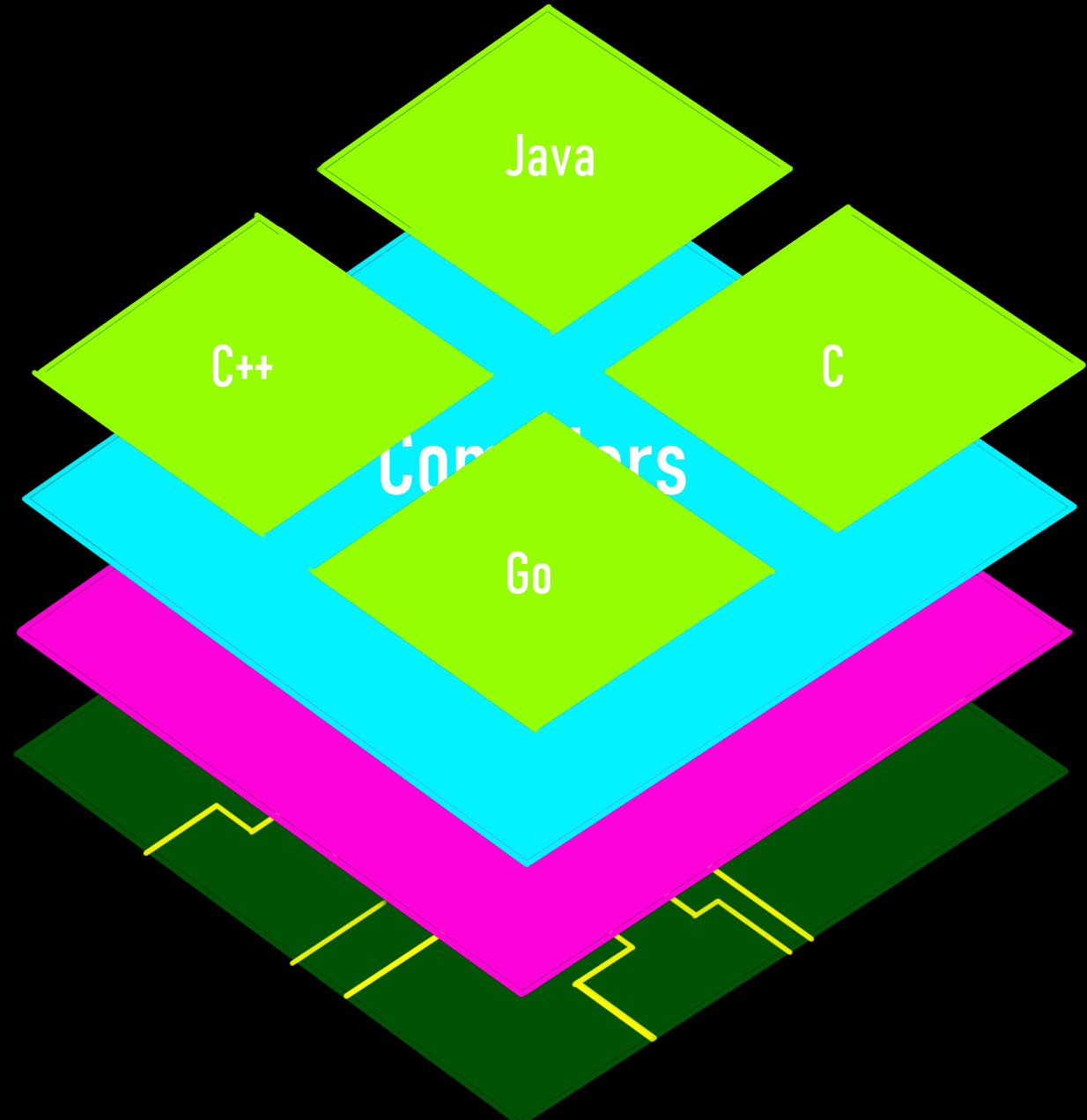


Diagram for the computation by the Engine of the Numbers of Bernoulli. See Note G. (page 722 *et seqq.*)



Why Go?

<https://github.com/kubernetes/kubernetes>



Arguments for Go Simplicity:

- Relatively new – 2009
- No VM (VM in Kubernetes is transferred to Containers) - simple and lightweight for microservices
- Goland, VS Code + [Plugins](#)
- Language of K8S



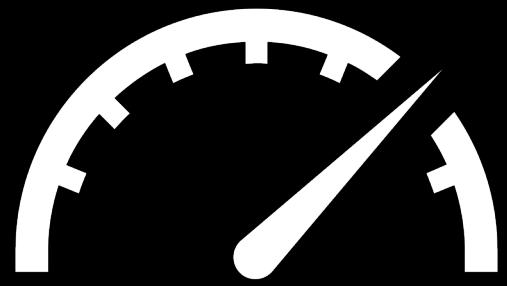
Demo

Success Story

“Nearly two-thirds of the global population will have Internet access by 2023. There will be 5.3 billion total Internet users (66 percent of global population) by 2023, up from 3.9 billion (51 percent of global population) in 2018.” - [Cisco Annual Internet Report \(2018-2023\) White Paper](#)



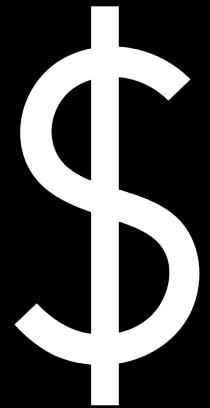
Security



Performance



Competitiveness



Cost



Reliability

OS



APP

APP

APP

APP



Security



Performance



Reliability



Competitiveness



Cost

"Kubernetes is a **container** orchestration engine for automating deployment, scaling, and management of containerized application and workloads."

OS

OS

OS

OS

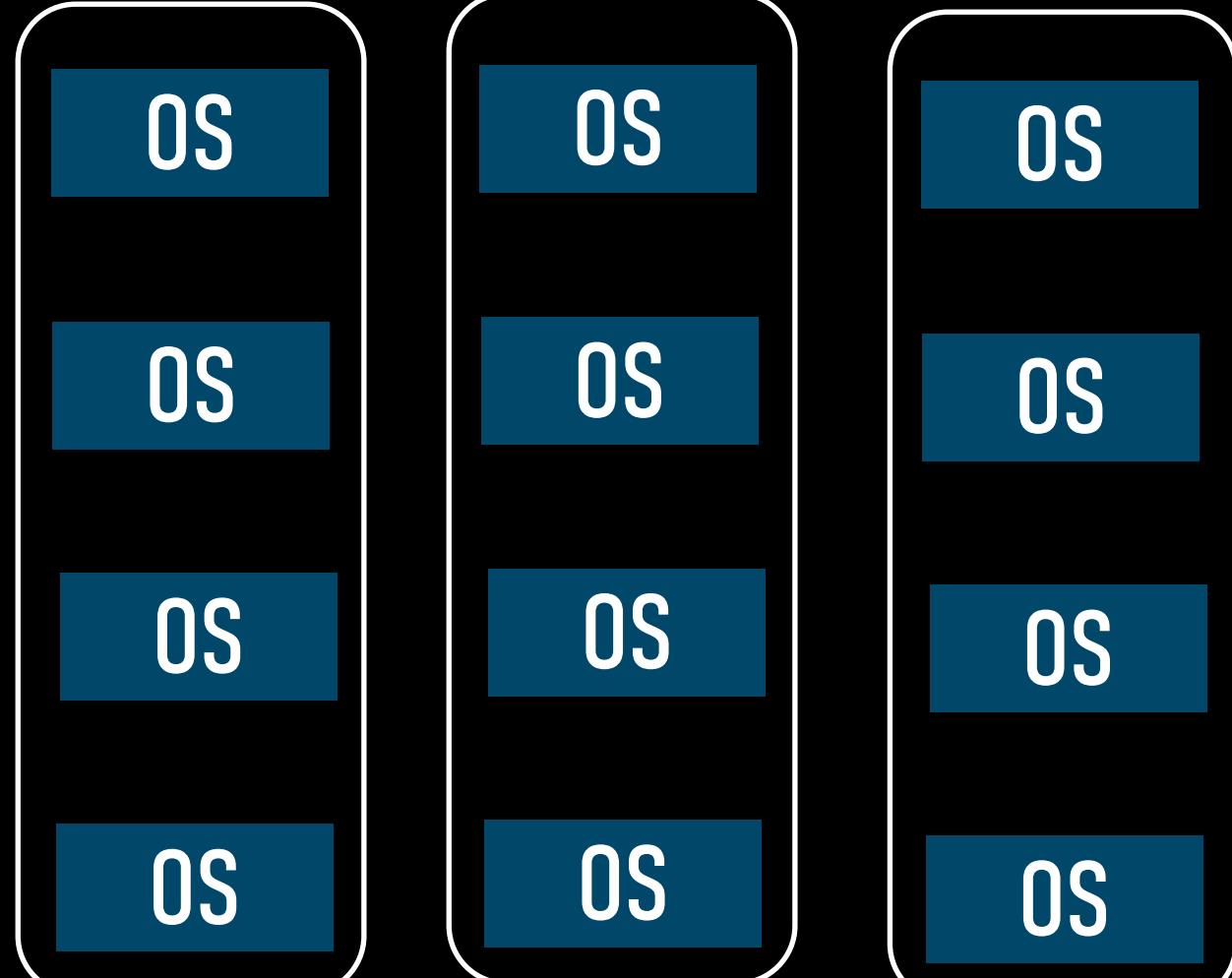


APP

APP

APP

APP



Horizontal Scaling, Multiple Zones

Performance



Competitiveness

OS

OS

OS

OS

Security



Reliability

APP

Container

APP

Container

APP

Container

APP

Container

Hyper Scalers

GKE

AKE

Amazon EKS

OVH MKS

Portability

 Cost Effectiveness

APP

Container

APP

Container

APP

Container

APP

Container

Containers

- Enforced by K8S
- Ready-to-run packages
- Requires Container Runtime
- Bound with OS and libraries
- Containers != Virtualization

Docker Demo

K8S Demo

Workloads

- Deployments
- StatefulSet
- DaemonSet
- Job/CronJob

Used Tech

- <https://kubernetes.io/> - <https://github.com/kubernetes/website/blob/master/LICENSE>,
<https://github.com/kubernetes/kubernetes/blob/master/LICENSE>
- <https://golang.org/> - <https://golang.org/LICENSEE>
- <https://docs.docker.com/> - <https://www.docker.com/legal>
- <https://k3d.io/> - <https://github.com/rancher/k3d/blob/main/LICENSE>
- <https://helm.sh/> - <https://github.com/helm/helm/blob/main/LICENSE>

Aktualne oferty pracy:

- <https://jobs.sap.com/search/?locationsearch=gliwice>

Śledź nas na:

- <https://hackyourcareer.github.io/>
- <https://www.facebook.com/Hack.your.Career/>
- <https://www.facebook.com/SAPLabsPoland/>

Q&A

Kahoot

- Prosimy o użycie nazwy, która umożliwi Waszą identyfikację
- Aby połączyć się z Kahootem musicie wejść na kahoot.it i podać kod

The End

