

MLOps + DevOps =



What will this  
**ignite** be  
about?

## Hype Cycle for Artificial Intelligence, 2023



[gartner.com](https://www.gartner.com)

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**Gartner**

@AnnieTalvasto

# Annie Talvasto

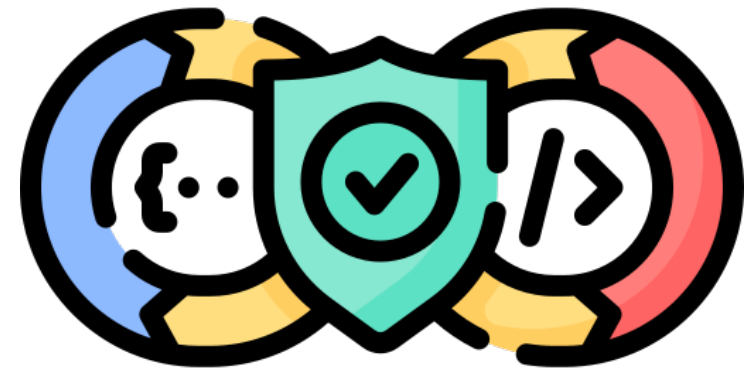
CMO at VSHN – The DevOps Company

- CNCF Ambassador
- Azure MVP
- Kubernetes & CNCF meetup co-organizer
- Startup-coach
- Created TechCraft Show – Tech interview show with Minecraft 🛠️💎🪨



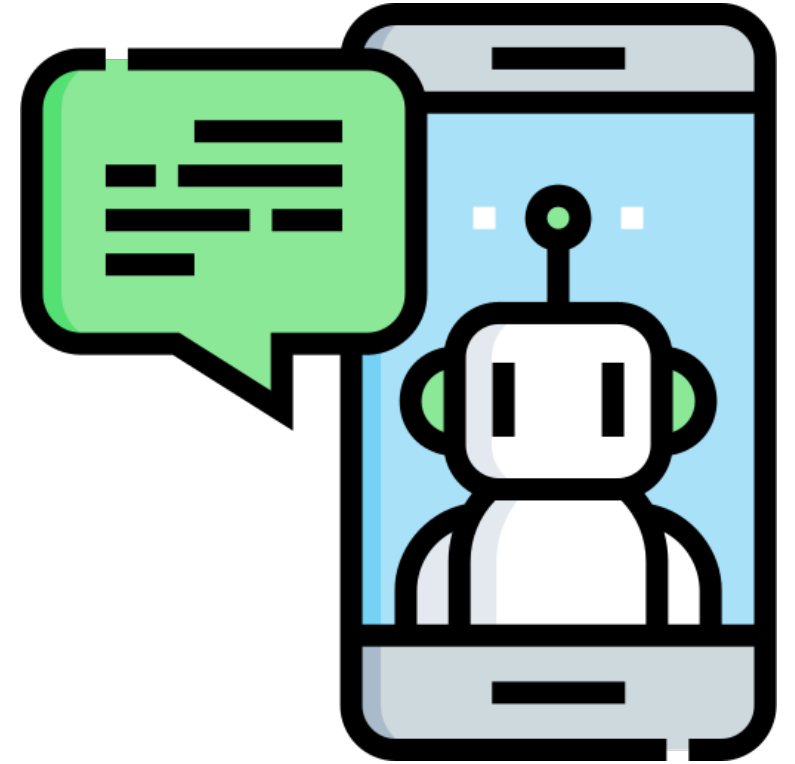
# DevOps

- DevOps, derived from "Development" and "Operations," is a cultural and technical framework that amalgamates software development with IT operations practices.

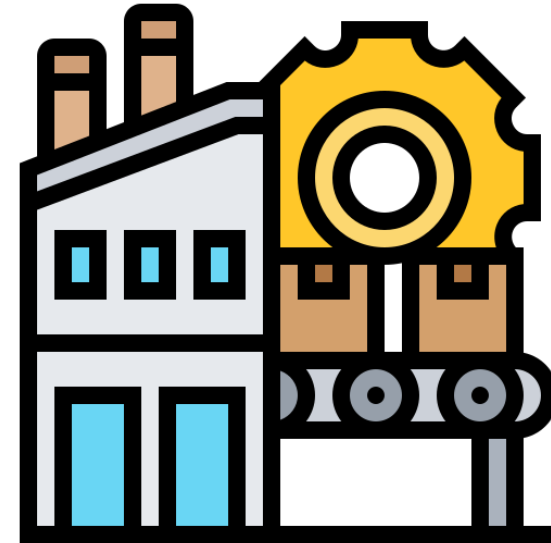
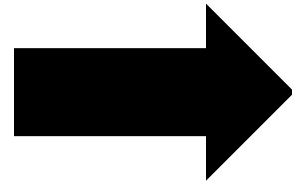


# MLOps

- MLOps, short for "**Machine Learning Operations**," is a set of practices, principles, and tools that combine machine learning (ML) with the practices of DevOps.



# From Research to **Production**

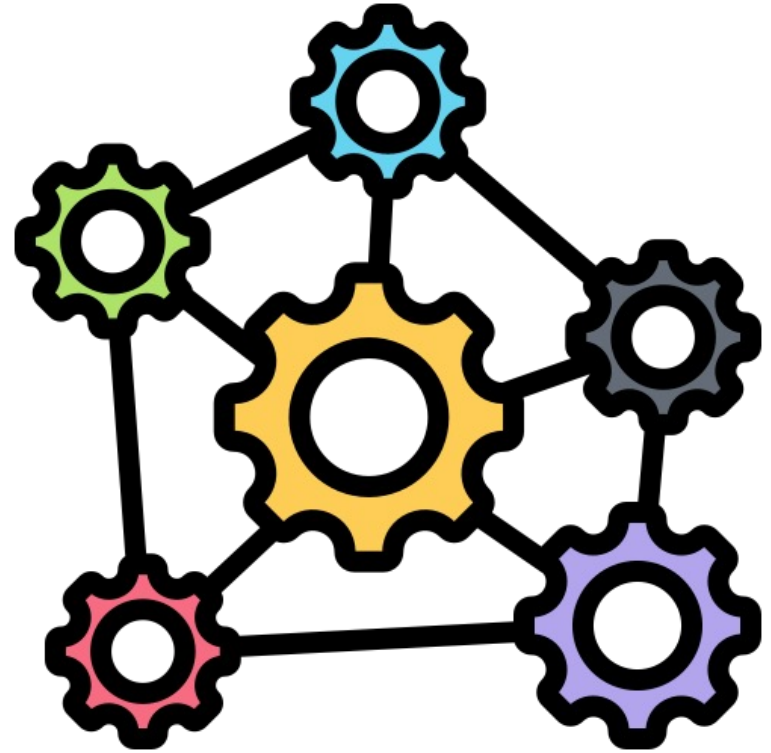


# Data-Centric Nature



# Model Complexity

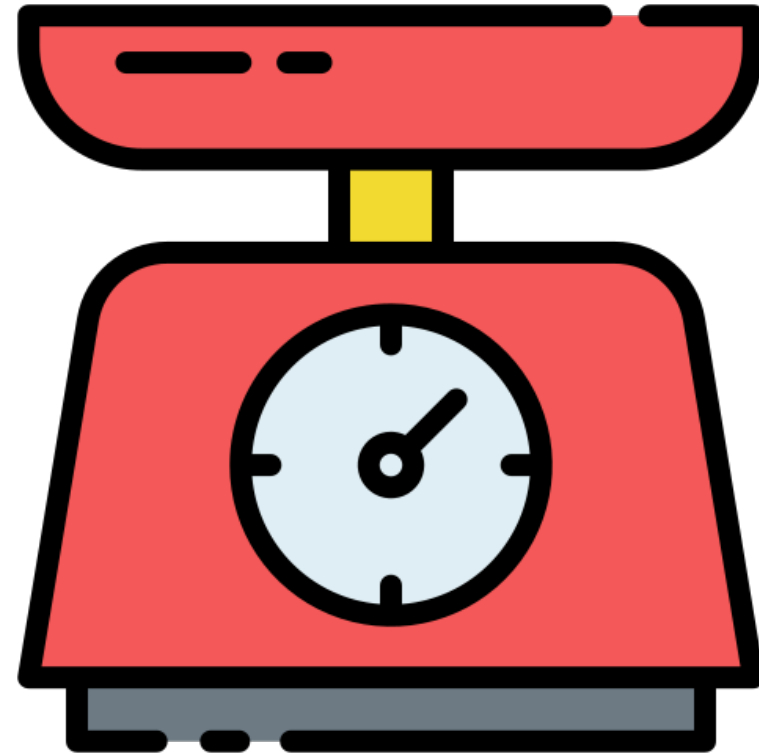
## Iterative Development





Scalability

Monitoring and  
Adaptation



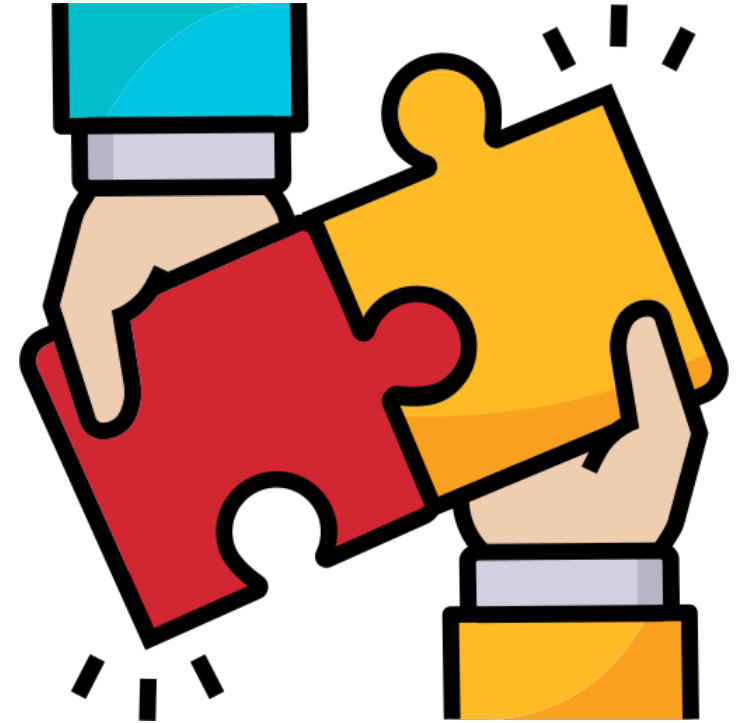
# Testing and Validation

## Explainability and Bias



Rapid Advancements

Collaboration



# Deployment Challenges

Cost

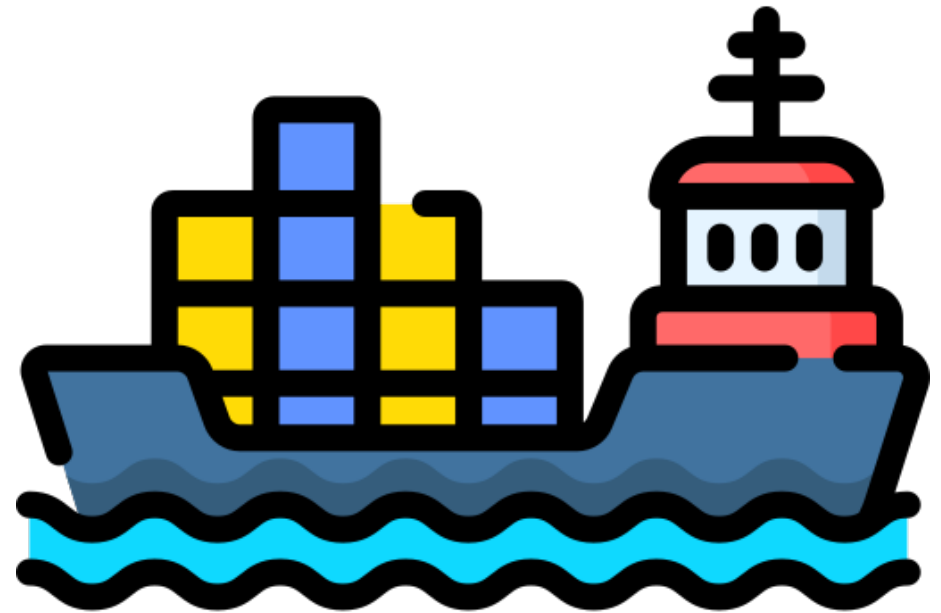


# Kubernetes & MLOps



# Kubernetes & MLOps

- Portability
- Customizability
- Consistency





**Kubeflow**



Prometheus



**argo**



PromCon  
North America 2021

## Best Practice Rapid Fire:

- MLOps ❤️ DevOps
- Understand bottlenecks







PromCon  
North America 2021

## Best Practice Rapid Fire:

- MLOps ❤️ DevOps
- Understand bottlenecks
- Uplevel your skills
- It is all in the **data**

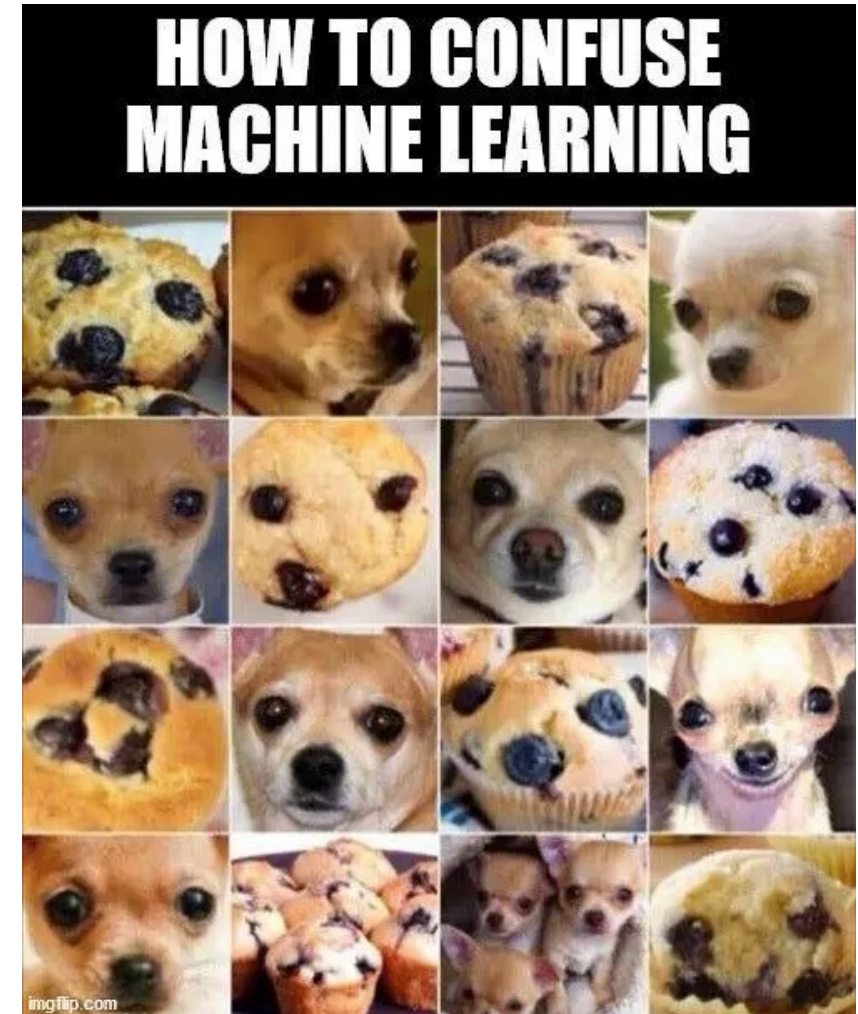


# Ethical Considerations



# Learn more

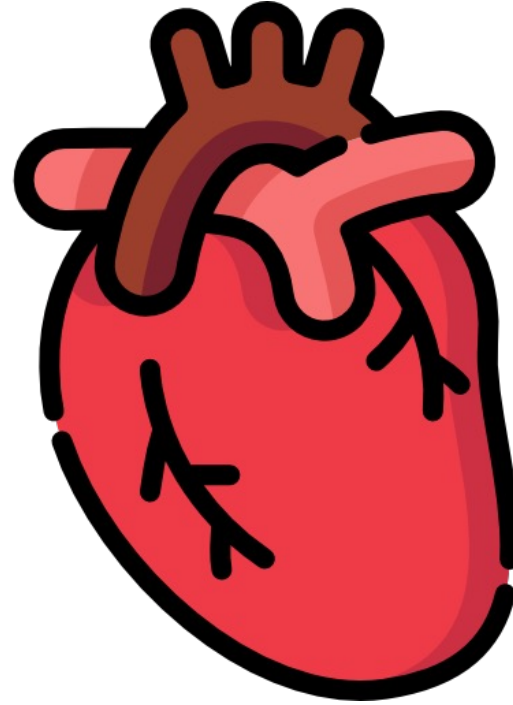
- Links and slides: [github.com/annietalvasto](https://github.com/annietalvasto)
- **Practical MLOps** by Noah Gift and Alfredo Deza (O'Reilly). Copyright 2021 Noah Gift and Alfredo Deza, 978-1-098-10301-9.
- **Cloud Native AI Day Europe 2024:**
  - <https://youtube.com/playlist?list=PLj6h78yzYM2PWGv34W6w5ssq1b1meRmY7&si=xVtogyR4BgibaUU>





PromCon  
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MLOps



Devops