

### A DATA ORCHESTRATION FRAMEWORK

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## TABLE OF CONTENTS

- A bit about myself
- Mage history & background
- Data orchestration
- Mage design principles
- Mage abstractions
- Demo



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  - Data Analyst at Afiniti
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  - B.Eng in computer engineer from AAST, MSc in DA/DS from UCF

# **HISTORY & BACKGROUND**

- Mage.ai was created in 2020 by Tommy Dang and Xiaoyou Wang, formerly of Airbnb
- Initially, Mage was designed as a no-code AI tool that automated some of the work involved in training an AI model, such as data cleaning, feature engineering, hyperparameter tuning (<u>link</u>)
- In June 2022, Mage pivoted from an AI tool to an open-source data pipeline tool (<u>link</u>)

# DATA ORCHESTRATION

- The process of managing, designing, and automating data related activities across various stages (collection, transformation, loading)
- A good data orchestrator enables (<u>link</u>):
  - Workflow management & automation
  - Error handling & debugging
  - Recovery

- > > Observability, monitoring, alerting
- Resource optimization
- Compliance / Auditing

Available tools:







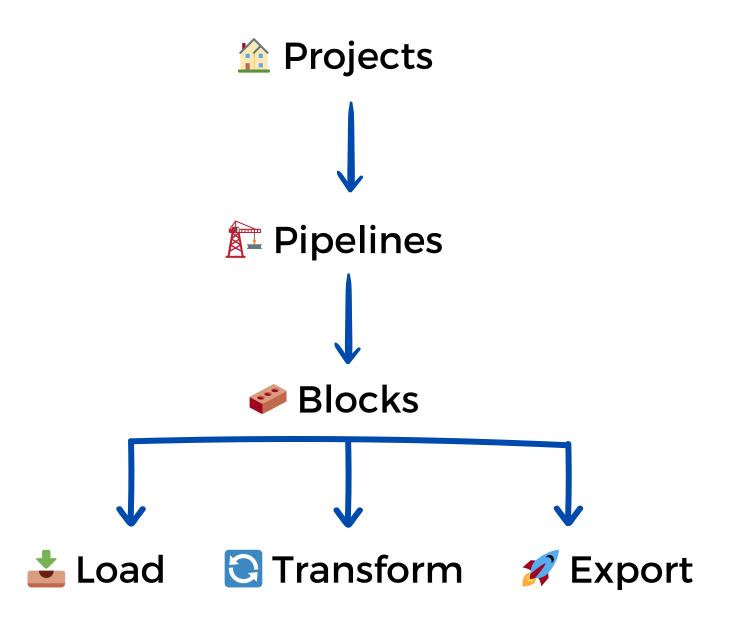




## MAGE DESIGN PRINCIPLES

- User-friendly experience
- Quick feedback loop through a notebook-like UI
- Engineering best practices are built-in
- **@** Data at the center
- **%** Scalable
- + Extensible

# **ABSTRACTIONS**



# THANK YOU <u>demo</u>