

# Lightscline

Data Reduction AI

Teaching machines to predict using 10% important data

# Problem

Prediction efficiency (ROI) on real-world sensor data is getting **worse**

More input \$  
& time



Modest output value

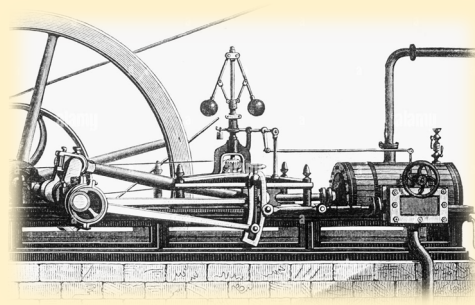
Early industrial revolution

More crude



Modest gasoline

More coal



Modest output power

Early AI revolution today

More AI infra + human capital

\$100M+ cloud    40+ hours /hr of data



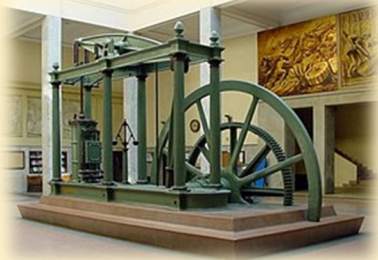
Just basic analysis -> modest \$ value

# Solution


Leverage **AI** to build a **10x** better refining process (predictions)

Early industrial revolution

Watt steam engine

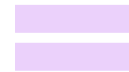
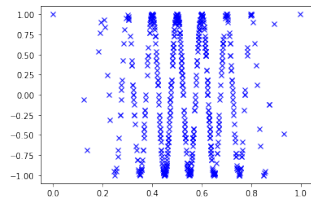


Standard Oil's refining



# Solution

Lightscline's AI learns to predict using 10% data reducing  
90% of AI infra & human time & costs



>10x faster and energy-efficient end-to-end  
predictions as we only analyze 10% of raw data

10x more gasoline from same  
amount of crude

# Team



**Manufacturing**  
ENGINEERING  
30 UNDER 30  
HONOREE

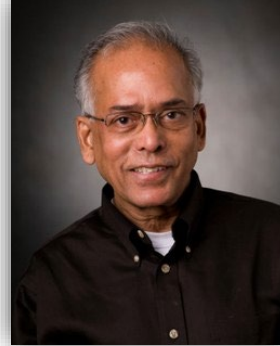
## Ankur Verma

Co-Founder & CEO,  
30 under 30 - Society of Mfg Engg,  
PhD Candidate,  
Ex-Fraunhofer, GM R&D



## Ayush Goyal

Co-Founder & CTO,  
MS Candidate in CS,  
Ex-UHG



## Prof. Soundar Kumara

Co-Founder & Chief Scientist,  
Allen E. Pearce and Allen M.  
Pearce Professor of Industrial  
Engineering, Father of Smart  
Manufacturing

## Advisors



## Todd Erdley

Founder at Videon,  
Director & Portfolio Manager  
at Ben Franklin Tech Partners



## Elizabeth Hay

Director, Launchbox  
HappyValley, Penn  
State



# Product

## Getting started

### Core IP

25k lines + 4 years R&D into 4 lines of code

```
from lightscline.lightscline import LightsclineEdge
## Load data into Lightscline
ls = Lightscline(data=data,fs = SAMPLING_FREQUENCY)
## Reduce the amount of data by 70% of the original
ls.reduce_and_preprocess_data(per_reduction=70)
## Train the model
ls.train_model(verbose=True,n_iters = 1000)
## checking the results
ls.test_model()
```

- Setup within 10 mins
- On-prem / cloud hosting
- No data sharing required



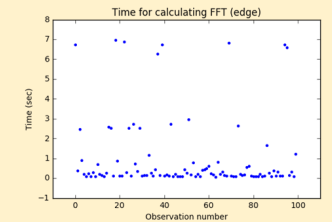
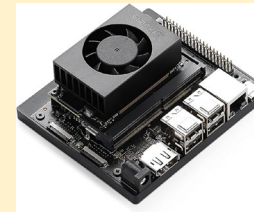
## Product roadmap

### Distribution

Lightscline cloud



Machine Learning Operations (MLOps)





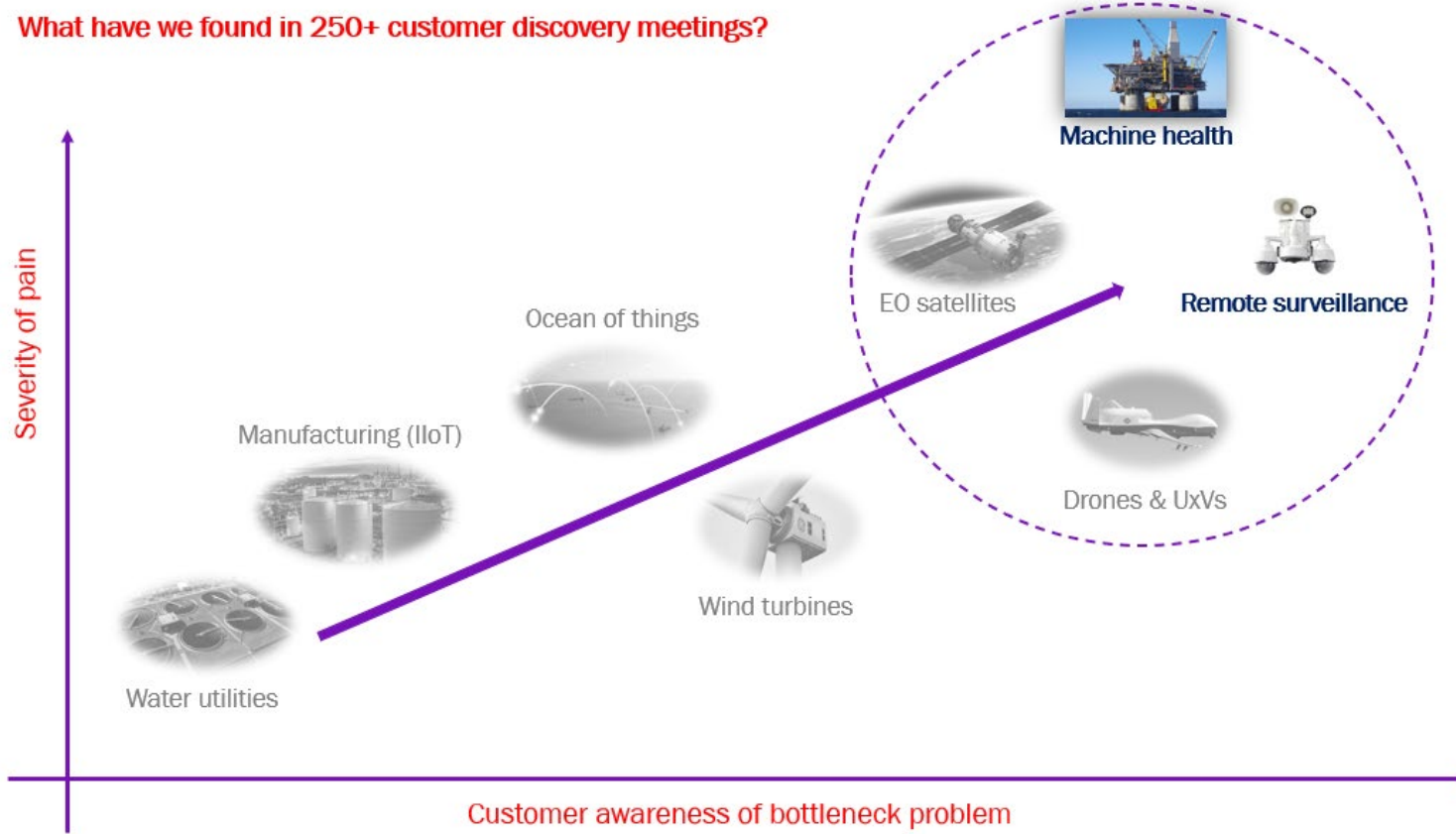
# Traction

\$125k Lol, F150 report, 10+ trials



\$55k - National & Regional awards

What have we found in 250+ customer discovery meetings?



People's Choice @ Penn State Venture & IP Conference



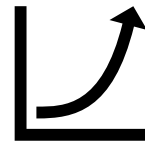
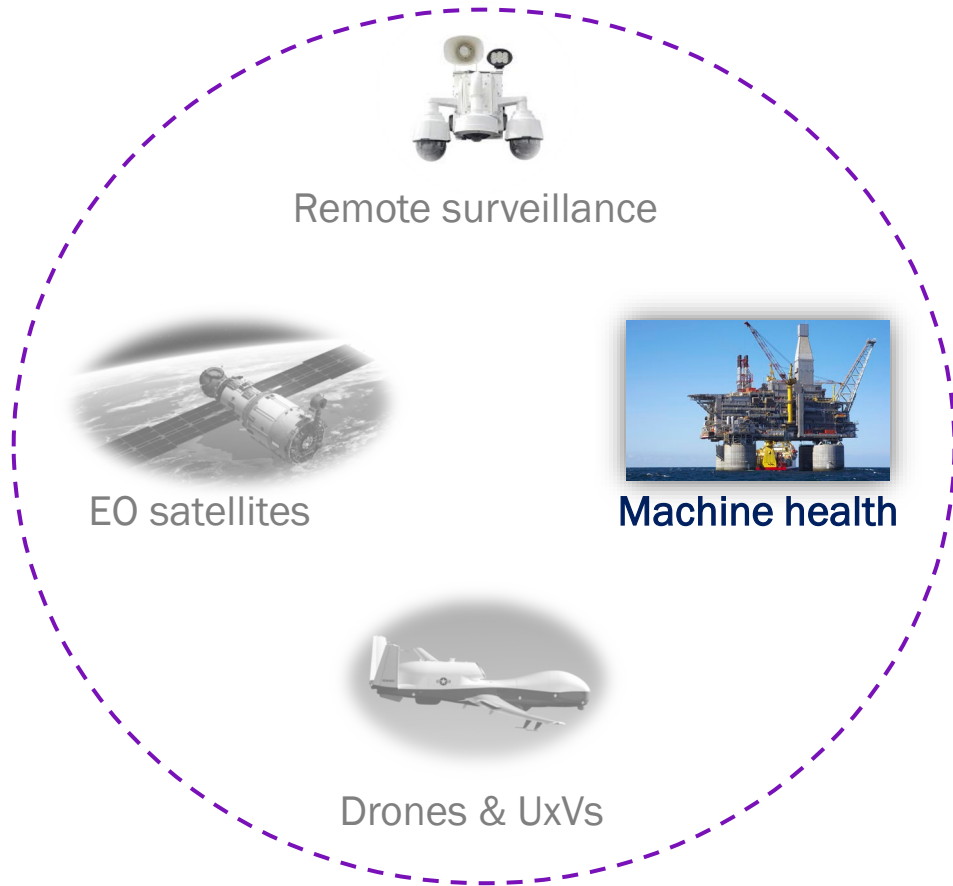
\$25k from Microsoft (potential to \$150k)



\$5k - Runners-up in TechCelerator



# Market size



Example in the machine health vertical



**\$60 Billion by 2030**



$\$25k \times 1000 + \$50k \times 250 = \$37.5 \text{ MM ARR (5 years)}$

(Mid-market + Enterprise)



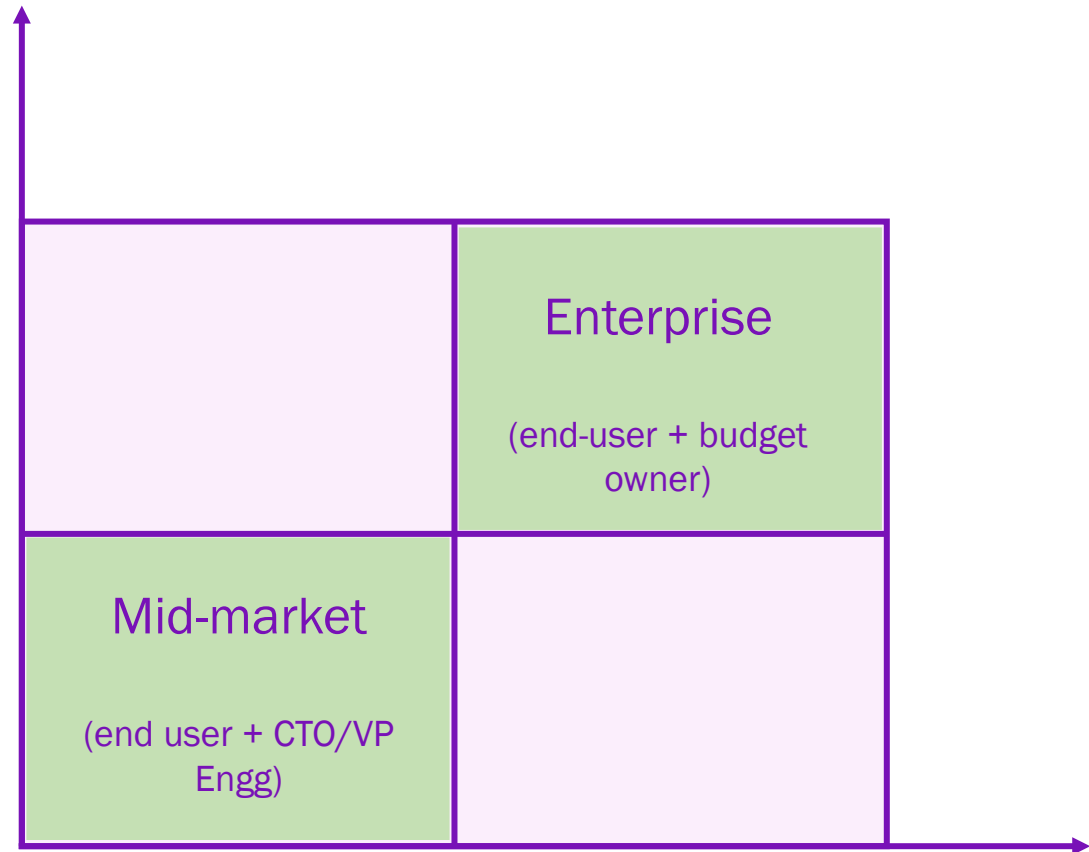
# Go-to-Market strategy & pipeline

Meetings

250+



ACV/user (\$)



Sales cycle (months)

# Revenue model






Annual user license

Mid-market	Enterprise
\$25k	\$50k

Example: 10 users (DS/MLE) -> \$1.2 MM (people) + \$1.3MM (infra) = \$2.5MM value

**80%** cloud cost reduction!

# Competition

					
Ease of use and integration	Yes	Yes	No	No	No
Compounding advantage (10x)	Yes	No	No	No	No
10x cost reduction	Yes, only analyze metadata	No	No	No	No
Product verticals	Vibration, sound, image, video, energy, DFOS	Vision & NLP focused			
Minimum deployment size	1	1	~1k		