



RapidCanvas < Fraud protection model 1

+ ADD ENTITY

+ ADD TRANSFORM

View: Canvas

## Founding Team

Deep and diverse experience in applying machine learning to fraud risk







# Challenges in Enterprise AI/ML projects



#### **Talent Shortfall**

Expert Data Scientists and Data Engineers are impossible to find



### **Ad hoc Infrastructure**

Tedious, manual, non-repeatable, error-prone process to go from concept to live ML deployment





### Time to Value

9 months typical time to go live for ML solutions

## Solution to challenges: RapidCanvas

Turnkey Full lifecycle
DSML platform

Pre-configured solutions

Multi-persona UX

Experimentation

Data Prep & transformation

Model Development & Deployment

Repeatable, Scalable, Reliable

Vertical/Industry expertise driven solution libraries

**Augmented Feature Engineering** 

No-code "drag-and-drop" user interface for domain experts

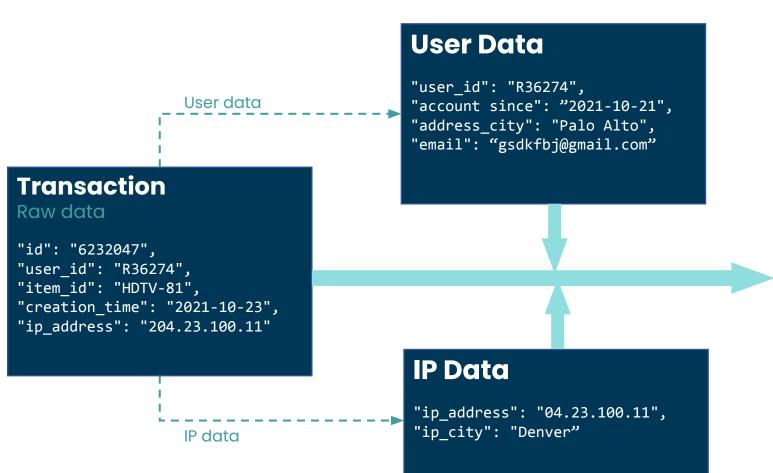
Notebook/code-centric user interface for technical users

Develop Multiple Scenarios

Visual What-if analysis

## **Augmented Feature Engineering**

Discovering and codifying signals from raw data using domain knowledge



```
Transaction
Data with Feature Engineering

"id": "6232047",
   "user_id": "R36274",
   "item_id": "HDTV-81",
   "creation_time": "2021-10-23",
   "ip_address": "204.23.100.11",

"user_account_age_days": 2,
   "user_email_vowel_ratio": 0,
   "user_ip_city_mismatch": "Yes",
   "transaction_amt_2stddev_pwdchange": "Yes"
```

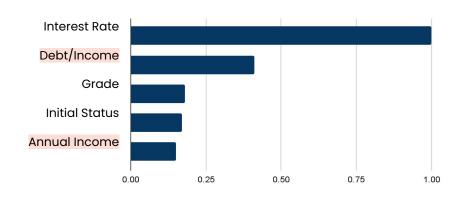
**30-50** Raw Data Fields

**200–3000** features generated

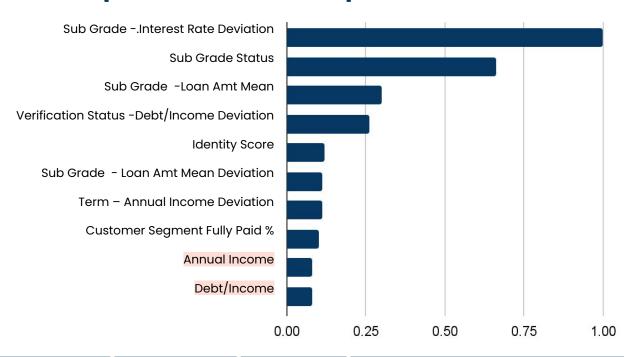
### **Better Features = Better Decisions**

Algorithms that deliver superior outcomes

### **Top Features : Without RapidCanvas**



### **Top Features: With RapidCanvas**



Platform	Data Scientist	Time to value	Data	Model	Results Improved?
Full Manual	Expert	Months	Manual	Manual	Baseline
RapidCanvas	Citizen	Days	Auto	Auto	19%

## **Benefits**

### **Rapid Solution Customization**

- Move machine learning projects beyond ideas and concepts to live production quickly.
- Significantly shorten time to value by automating the data science pipeline.
- o Empowering more people across the organization to participate in data science projects.
- Improve machine learning outcomes through experimentation.

#### RapidCanvas Generalized Solution Fully Automated Solution Performance in Public Competitions

No.	Dataset	Vertical	Metric	Score	Rank	Total Teams	Top %
1	Titanic - Machine Learning from Disaster	General	Accuracy	0.79665	553	13741	4%
2	Spaceship Titanic	General	AUC	0.80289	403	2127	19%
3	IEEE-CIS Fraud Detection	Finance	AUC	0.930384	95	6355	1%
4	Santander Customer Satisfaction	Finance	AUC	0.82626	1156	5067	23%
5	BNP Paribas Cardif Claims Management	Insurance	Log Loss	0.44494	112	2873	4%



## **Thank You**

