

# YANG YAN

## BA. COMPUTER SCIENCE & MATHEMATICS

**MIT**, 2017-2021 (on leave) · 4.5/5

Randomized Algorithms · Database  
Systems · Advanced Algorithms ·  
Stat. Learning Theory · Probability &  
Random Variables · Group Theory  
Traders@MIT · AI@MIT · DFA

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**USACO FINALIST '14**

**USAMO QUALIFIER '13 '15 '16**

**ISEF FINALIST '16**

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**C++**: 17 · (n)make · WinAPI

**Javascript**: ES6 · React · Vue · TS

**Python**: 3.8 · torch · scikit · flask

Postgres · Markdown · TeX · Docker

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## EMILIA HTTP & SMTP

*gilgamesh.cc*, 2015+

Reverse-engineered TCP, HTTP,  
SMTP servers written in native,  
cross-platform C++17. Original  
front-end design in native ES6.

## MIT CONFESSIONS SIM.

*fb.com/mitconfessionssim*, 2018

Char-RNN and Bayesian text models  
for MIT Confessions. Data scraping  
& posting integration in Selenium.

## TAB-SPACE, 2020

Collaborative browser tabs  
streamed via Chromium source.

## PRODUCT MANAGER, PAYMENTS

**Nuvo Technologies**, 2023-2024

- Led customer, banking, service provider, and internal stakeholder conversations to scope out Nuvo's first payments product, features, pricing.
- Led and engineered with a two-person team to build Nuvo Pay: banking, API, web-app, regulatory.

## SOFTWARE ENGINEER, RISK

**Ramp**, 2021-2022

- Modeled credit, fraud, and operations risks, for an expected ~80% ≈ 5mm annual fraud averted.
- Built and deployed risk models to support the Bill Pay & Flex launches, the existing Card product, and all bank transfers.
- Optimized production model evaluation latency, speeding up every single transaction and transfer that ever occurs at Ramp by ~20ms ≈ 10%.

## QUANTITATIVE RESEARCH INTERN

**D. E. Shaw & Co.**, 2020

- Designed and built a market simulator, each agent having personalized strategy and private forecasts, optimizing P&L under different training scenarios.
- Explained effects of varying number of agents, forecast horizons/accuracies, and forecast correlations, on agent performance.

**PREVIOUS**: Intern @ **Scale AI**, Intern @ **Microsoft**

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## UNDERGRADUATE RESEARCHER

**SIA Lab @ MIT**, 2020-2021

on "Adversarial Examples in Simpler Settings"

with Greg Wornell, Tony Wang, Yuheng Bu

- Derived robustness measure for classifier features (pen-ultimate NN layer), discarding the lowest of which will naively improve model robustness.
- Verified hypothesized robustness inheritance effects in select transfer learning scenarios.