

Joe Mordetsky

Who Am I?

I'm Joe Mordetsky. I work at Bloomberg (for a while now) and I've done a bunch of other cool things. I've been an engineer, a manager, and an entrepreneur.

I used to love JavaScript, but now I love Python and I tolerate C++. :)

Cool Stuff on Github:

Before we delve into my professional life, here are some interesting projects I've worked on and shared on GitHub:

- [machine_learning_finance](#) - My current passion project. This repository is a collection of scripts, tools, and experiments that document my journey learning about reinforcement learning and [stable-baselines 3](#). The core AI is trained against various derivatives of pricing movement indicators to determine optimal entry/exit points. There's still a lot to do and a ton to learn, but it's been an incredible journey so far.
- [trafficcone](#) - I mentioned that my first love was JavaScript. This was one of the first JavaScript projects I ever wrote, and it's what sparked my interest in JavaScript and the early NodeJS world. It's a canvas-based game engine where I wired up a bunch of ripped Diablo assets and created a character puppet system around them. The JavaScript code makes me cringe a little now, years later, but this project still holds a special place in my heart.
- [c8](#) - Not too long ago, Bloomberg's Node.js-based UI frameworks needed code coverage to be integrated into our developer tools. I had the opportunity to contribute some code to c8, along with some of the supporting libraries for [istanbul](#).
- [min-crypto](#) - A TypeScript trading backtester. In hindsight, Python would have been a better choice.
- [Algorithmic-trading](#) - My first-ever Python project, and my initial attempts at training LSTMs with TensorFlow on time-series data. This was the precursor to my work with Stable-Baselines.

Experience

Bloomberg LP

Team Lead - UI Infrastructure *Apr 2021 - Present*

Changed roles to lead a team of engineers responsible for the Rapid Application Engine and Framework, a JavaScript platform that powers 90% of terminal UIs at Bloomberg. In the short time we've been together, we have led major innovations on the platform around memory tooling, a headless CLI environment, better telemetry/observability, a massive migration to Linux, static code analysis, and upgrading the platform's core JavaScript engine.

Senior Engineer - UI Infrastructure *Apr 2018 - Apr 2021*

Transitioned to the UI Infrastructure team to leverage my in-depth experience with the internals of the R+ framework. I was the technical owner of core client-side infrastructure for initialization and process management for the Bloomberg Terminal. Massively reduced outages during my tenure by leading the implementation of an integration system targeted at verifying Bloomberg's complex multi-process client-side architecture.

Senior Engineer - Trading Systems *Apr 2014 - Apr 2018*

Reporting directly to the head of Trading Systems UI, I worked on telemetry, performance, code sharing, and testing infrastructure across multiple teams. I changed team culture to embrace TDD and worked with Bloomberg UI Infrastructure as a product owner and collaborator to make these features of the platform more robust and meet Trading System's high demands.

Cranial Trauma Labs**CEO/Founder***Oct 2013 - Oct 2014*

After Zynga, I founded a game studio with the innovative idea of publishing fully playable snapshots of mid-core games on social media to drive traffic to actual games on mobile devices. The game code was written in JavaScript with custom bindings for all environments (Cocos2dx).

While the dual role of CEO and lead engineer proved challenging and the environment for raising money for a game studio was difficult, the experience was incredibly valuable. After a year, I made the decision to close down the effort and explore other opportunities. Despite the challenges, I consider this experience an invaluable part of my professional growth.

Zynga**CTO - The Friend Game, Architect - Draw Something 2***Apr 2012 - Aug 2013*

Began as a personal hobby, I created an open-source sprite-based game engine using JavaScript and Canvas that emulated rendering techniques used in early Diablo games on the web. This project caught the attention of Zynga through a mutual connection, leading to my role as a studio CTO and architect on multiple titles.

Infogroup**CTO, Platform and Data Solutions***Sep 2011 - Apr 2012*

Held a strategic role reporting directly to CCMP Capital (a Private Equity group), the holding company of Infogroup. My primary responsibility was to assess startups that could feasibly be used to replace portions of the aging infrastructure at Infogroup. I oversaw the technical review of [GoTime](#) during negotiations for its acquisition.

After gaining experience in this role, I decided to pursue opportunities more aligned with my interests.

Thomson Reuters

Head of Framework Product Management, Markets Eikon

Aug 2010 - Sep 2011

Served as the technical product owner of the Eikon, a Bloomberg Terminal competitor. I oversaw the migration of a legacy windowing system into a modern tabbed system that mimicked the new tab functionality in Google Chrome at the time.

Uniloc

VP Engineering

Jan 2006 - Aug 2010

Led a team of engineers to build Uniloc's digital fingerprinting, DRM, and device-based identity and analytics systems.

Relegence ([acquired by AOL on November 8, 2006](#))

VP Professional Services

2002 - 2006

Led a team of engineers focused on integrating Relegence's Semantic Analysis and Content Trends Analysis products into customers in the Financial Services sector.

Bluewave ([acquired by Maersk 2001](#))

New York Technology

1999 - 2002

Served as a web developer during the early dot-com boom. Built websites for several large pharmaceutical companies, including Roche, Pfizer, and GlaxoSmithKline.

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