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| DRUCE VERTES, CFA | DEVELOPER/DATA SCIENTIST |

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SUMMARY



* Consulting on development of machine learning, alternative data, predictive analytics systems.
* Developer, quantitative analyst, IT manager with leading hedge funds and Wall Street firms since 1992.
* 3 years as CTO of a $2b long/short equity hedge fund.

EXPERIENCE



**StreetEYE, LLC** · Founder · 2011 to Current · New York, NY

Independent consulting, startup projects.

* Steadfast Capital: Consultant on development of machine learning and alternative data projects using sklearn, Keras, DataRobot.
* [StreetEYE.com](http://www.streeteye.com/): Developed Web news aggregator/algorithmic news feed for financial market news using machine learning (Keras/sklearn/NLTK).
* Writing on financial market topics: [Alpha Architect](https://alphaarchitect.com/user/druce.vertes/), [AAII Journal](https://www.aaii.com/journal/article/safe-withdrawal-rates-and-certainty-equivalent-spending), [CFA Inside Investing](https://blogs.cfainstitute.org/investor/author/drucevertes1/), [ValueWalk](https://www.valuewalk.com/2014/01/bitcoin-is-the-linux-of-payments/), [Seeking Alpha](https://seekingalpha.com/article/1689602-getting-schooled-in-risk-the-lessons-of-poker), [Huffington Post](https://www.huffingtonpost.com/author/druce-vertes-cfa), [Benzinga](https://www.benzinga.com/author/druce-vertes).

**Hoplite Capital Management** · Chief Technology Officer · 2008 to 2010 · New York, NY

Managed all technology functions for a long/short equity hedge fund: Tiger Cub, 25 staff, $2b+ AUM.

* Brought infrastructure, workflows, policies up to industry best practice, emphasizing efficient workflows, disaster recovery, cybersecurity.
* Developed real­time P&L spreadsheet, attribution, portfolio analytics, ETL workflows. Managed Eze Castle order management system, security master/reference data, FIX electronic trading, compliance, Oasys post­trade matching, internal workflows and interfaces with external service providers.
* Implemented IT infrastructure (network, Bloomberg, disaster recovery, remote access via Citrix and VPN, mobile device management, telecoms (Avaya).
* Supported 3rd­party software for research content management (Tamale), accounting (SS&C Advisorware), investor relations (PerTrac CMS), MS Office.

**Charles River Development** · Implementation Manager · 2005 to 2007 · New York, NY

Consulting engagement manager for leading investment management system vendor, focused on NY hedge funds.

* Led implementations of Charles River for major hedge funds (Moore Capital, Atticus).
* Activities included requirements analysis, workflow design, trading system implementation and configuration, unit and parallel testing, training, project management, trading support and troubleshooting.
* Reengineered workflows including trading desk (blotter, FIX electronic trading), portfolio analytics, performance measurement/attribution, compliance.

**StreetEYE, LLC** · Independent Consultant · 1995 to 2005 · New York, NY

Independent software development consultant focused on financial markets, trading, hedge funds. Selected engagements:

* CF Global Trading: Interim CTO.
* FX Alliance, LLC: Managed development of Web presence for leading multi­dealer FX trading startup.
* Goldman Sachs: Managed development of Web presence/CMS for FX research sales and trading.
* Morgan Stanley: Analytics and reporting for hedge fund clients.
* FAME: Comprehensive online demos.

**Caxton Corporation** · Analyst · 1993 to 1994

Developer/front office analyst for leading macro hedge fund. Implemented databases of economic time­series and corporate fundamentals in major global markets in FAME; developed portfolio analytics in FAME, Perl and Excel; Identified country and sector trading ideas using proprietary analytical tools.

**Tiger Management Corporation** · Developer/Analyst · 1991 to 1992

Developer of trading system for equities, fixed income, derivatives trades using C++, UIM/X, Informix DB; built Tiger's first real­time P&L spreadsheet.

**Salomon Brothers Inc.** · Quantitative Research Analyst · 1986 to 1991

Developed software to construct optimized equity portfolios using Salomon’s proprietary multi­factor risk attribute model. Implemented analytics to estimate stock portfolio volatility, tracking error vs. market indexes, correlation to fundamental factors including inflation, interest rates; perform portfolio optimization using linear and quadratic programming. Worked with institutional clients to structure optimized portfolios.

Initial role was as economics analyst/forecaster. Created statistical models and forecasts of economic indicators (CPI, PPI, leading indicators) using FAME and Excel; Wrote internal and external research reports; gave real-time analysis to traders, clients on economic releases.

EDUCATION



Columbia College, New York, NY: B.A. Computer Science/Economics

Lycée Français de New York: French Baccalaureate C (Math/Physics)

Metis, New York, NY: 12-week immersive data science bootcamp on machine learning methods in Python

CFA Institute: CFA Charterholder

Coursera: Machine Learning (Ng), Statistical Learning (Hastie/Tibshirani), R Programming, Practical Machine Learning (R), Game Theory

SKILLS



**LANGUAGES:** Python, R, JavaScript, C/C++, SQL, Java, HTML/CSS, Matlab, Perl, Excel/VBA

**PACKAGES/ALGORITHMS:** Sklearn, Keras, TensorFlow, Numpy, Scipy, Pandas, Supervised Machine Learning, Linear Regression, Logistic Regression, Generalized Linear Models, Neural Networks, RNNs, CNNs, Unsupervised Machine Learning, PCA, Clustering, Anomaly Detection, NLP, Word2vec, NLTK, Topic Modeling, Visualization, Plotly, Matplotlib

**ENVIRONMENTS:** Windows, Linux (Ubuntu), AWS, Google Cloud Platform