DRUCE VERTES

DEVELOPER/DATA SCIENTIST

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SUMMARY

- Consultant on generative AI, machine learning, alternative data, predictive analytics, software development (primarily Python).
- 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.
- Objective: individual contributor, team lead, architect on generative AI projects in investment management, banking.

EXPERIENCE

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

Independent consultant, startup projects, generative AI.

- Evercore: Consultant on generative AI projects; worked on POCs for sell side research report summarization, retrieval-augmented generation, content creation for meeting agendas, text2SQL on CRM data, ReAct agent workflows, advanced data analysis, advanced prompt engineering. Wrote draft firm white paper on gen-AI adoption, background, opportunities, risks.
- Steadfast Capital: Development of machine learning and alternative data projects for hedge fund using sklearn, Keras, DataRobot.
- StreetEYE.com: Created news aggregator/algorithmic news feed for financial market news using machine learning (Keras/sklearn/NLTK).
- Market blogging: Alpha Architect, Towards Data Science, CFA Inside Investing, Advisor Perspectives, AAII Journal, ValueWalk, Seeking Alpha, Benzinga.

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 workflow efficiency, disaster recovery, cybersecurity.
- Developed real-time P&L spreadsheet, attribution, portfolio analytics and ETL pipelines with MS SQL. Managed Eze Castle order management system, security master/reference data, FIX electronic trading, compliance, Oasys post-trade matching, internal workflows and external service providers.
- Implemented IT infrastructure (network, Bloomberg, disaster recovery, remote access via Citrix and VPN, mobile device management, telecoms (Avaya).
- Supported 3rd-party 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 multi-dealer 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 time-series 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 real-time P&L spreadsheet.

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

Developed software to construct optimized equity portfolios using Salomon's proprietary multi-factor 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)

CFA Institute: Awarded CFA Charter 2009

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 (including AI Studio), Azure (including AI Studio), Docker