



Ciklum Wrocław Java Meetup with AlgoTrader

May 10th 2018

Andy Flury

Founder & CEO (Zurich Office)

- Founder and CEO @ AlgoTrader AG
Partner and Head of Algorithmic Trading at Linard Capital AG
- Masters of Science from ETH Zurich
- Executive MBA from the University of St. Gallen



Who are we



Founded in 2014, AlgoTrader supports Quant Hedge Funds and Crypto Trading Companies as the ultimate algorithmic trading solution. We automate complex, quantitative trading strategies in forex, options, futures, stocks, ETFs, and Cryptocurrency markets.



Written in Java, AlgoTrader is an event based system built on a robust, highly optimized, high-availability, low-latency architecture using state-of-the-art open source technologies like Java, Spring, Hibernate, Complex Event Processing (CEP), QuickFix/J, ActiveMQ, HTML 5, React JS, Bootstrap & Docker.

AlgoTrader Platform

ALGOTrader Management ALL

(\$85'699.31) (\$43'515.59) \$1'859'012.02 22 \$2'870'788.07

Real P&L Unreal P&L Market Value Positions Net Liquidity

Market Data (22)

symbol	last	volBid	bid	ask	volAsk	vol
AAPL	94.55 ▲	12	94.54 ↑	94.55 ↓	1	451971
ACN	102.24 ▲	1	102.22 ↓	102.28 ↓	2	4808
AMZN	587.26 ▲	1	587.13 ↓	587.55 ↓	1	11600
BA	116.16 ▲	2	116.12 ↑	116.16 ▲	1	112195
CLH2016	31.26 ▲	7	31.26 ↓	31.27 ↓	12	314831
EBAY	26.4 ▲	20	26.38 ↓	26.39 ↓	3	67211
EURCNY	↓	2000000	1.10615 ↓	1.1063 ↑	1000000	0
EURGBP	↓	16184000	0.76345 ↑	0.7635 ↓	9660000	0
EURUSD	↓	21368000	1.08705 ↓	1.0871 ↓	10844000	0
GRPCHF	↓	9139000	1.44885 ↑	1.448 ↓	1000000	0

Position (22)

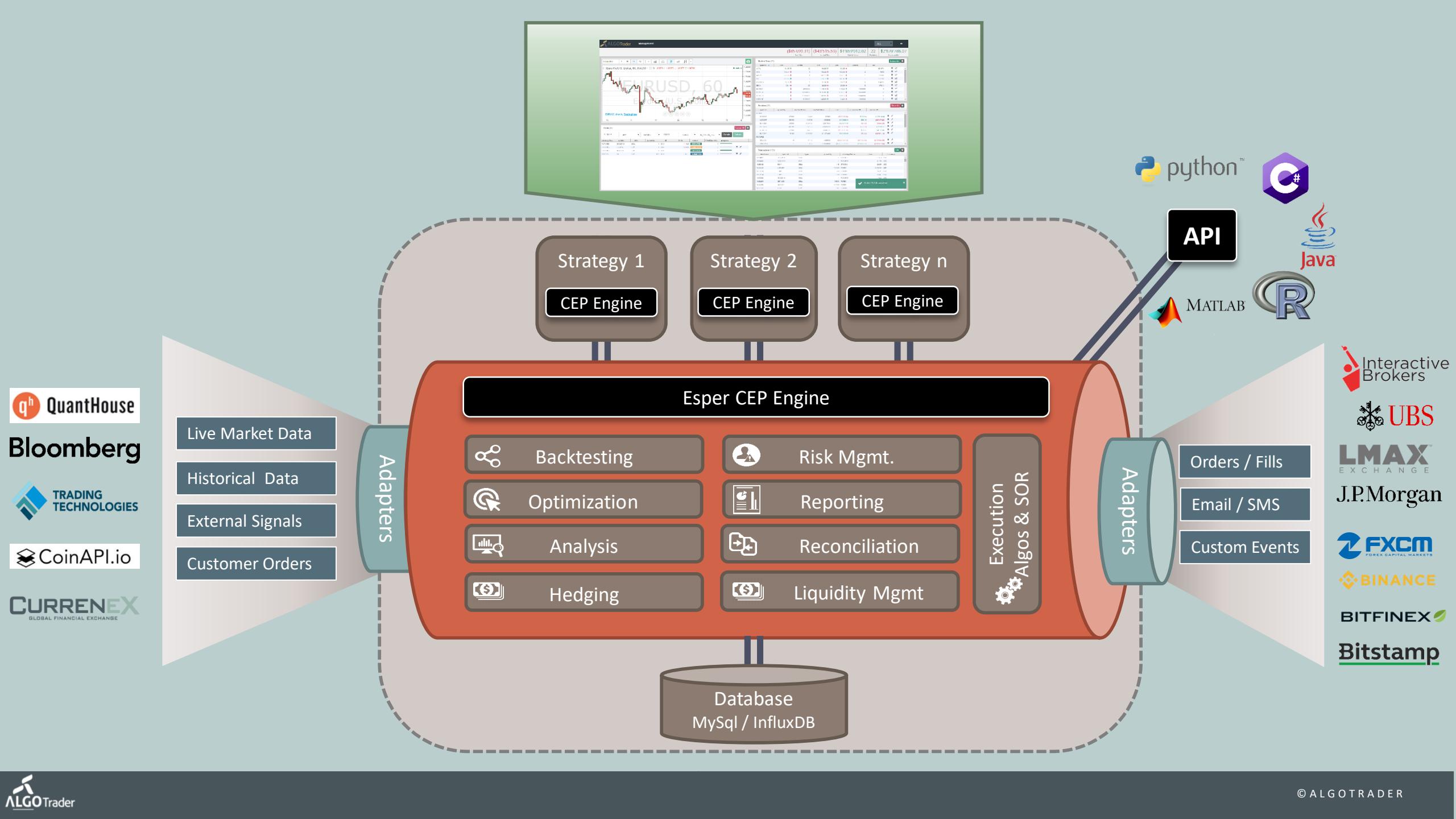
symbol	quantity	marketPrice	marketValue	cost	unrealizedPL	realizedPL
FOREX						
GBPCNY	-67000	1.429	-97083	(\$37'218.86)	\$135.84	\$13'918.84
USDCNY	39400	1.0175	40089.5	\$40'036.01	\$53.49	(\$2'047.23)
EURUSD	20800	1.08705	22610.64	\$22'617.42	(\$6.79)	(\$566.25)
EURGBP	-46700	0.7635	-35855.45	(\$36'621.94)	(\$33.81)	(\$3'36.51)
GBPUKD	-22900	1.4239	-32607.31	(\$32'626.28)	\$18.57	\$4'137.86
EURCHF	19100	1.10615	21127.465	\$21'132.69	(\$5.22)	(\$4'951.18)
FUTURES						
SIG2016	-4	14.43	-288600	(\$285'131.12)	(\$3'468.88)	(\$19'056.09)
ZVN2016	6	483	1305000	\$12'031'672.92	\$16'427.08	(\$2'6427.04)

Transaction (133)

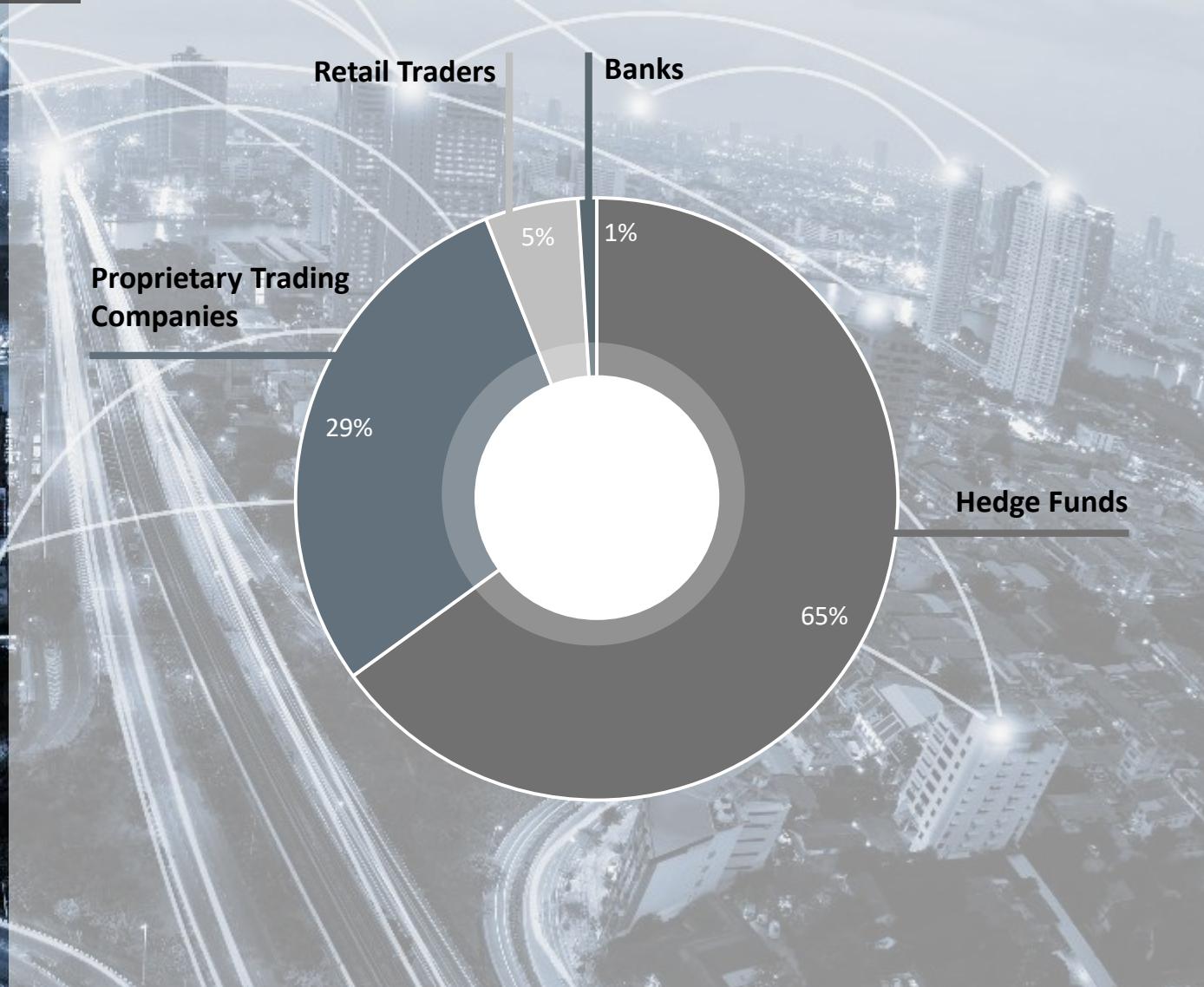
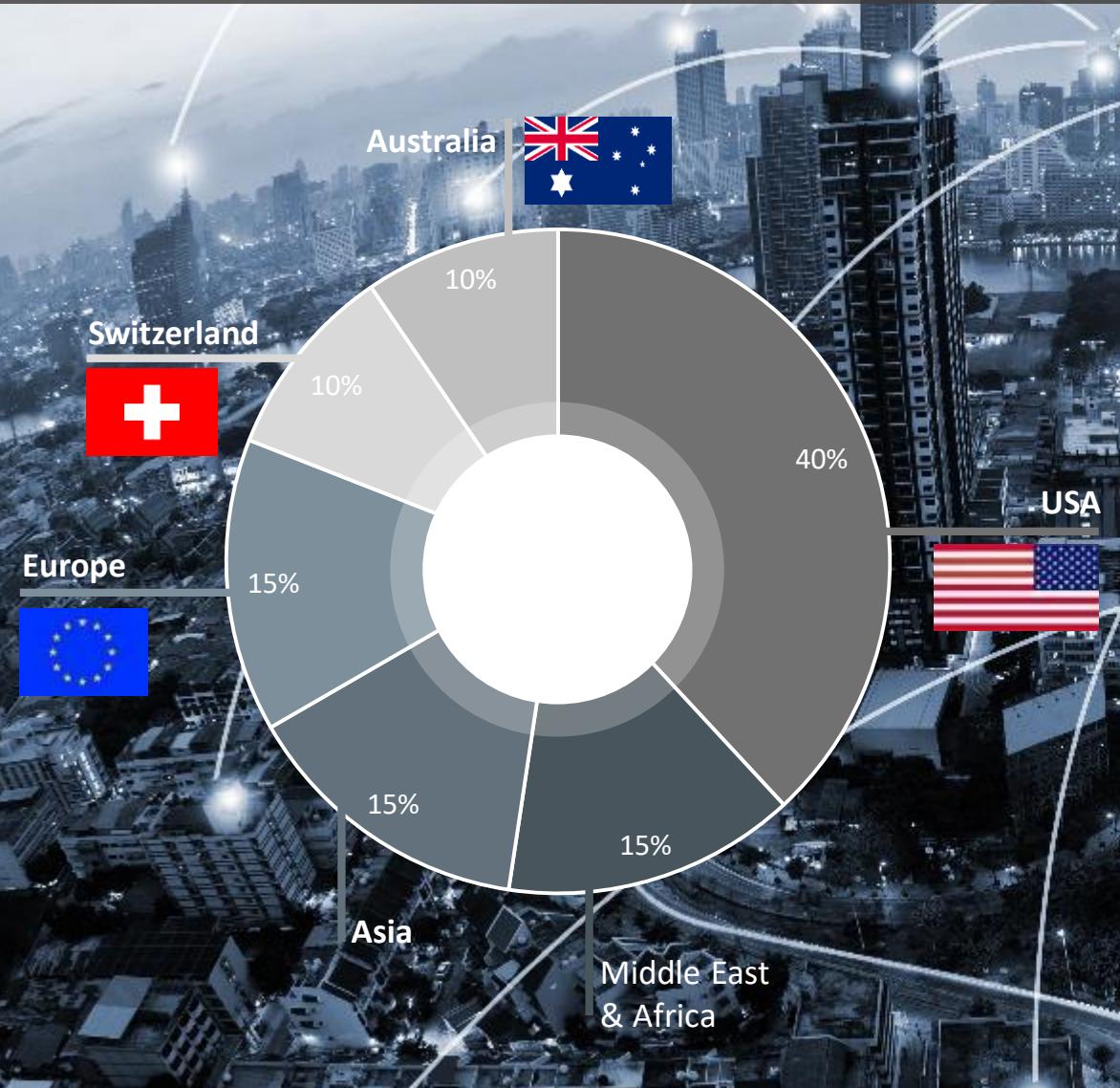
dateTime	symbol	type	quantity	strategyName	price	currency
16:54:07	GCQ2016	SELL	-1	FUTURES	1116.3	USD
16:54:02	NGH2016	BUY	1	FUTURES	2.178	USD
16:53:42	EBAY	SELL	-145	STOCKS	26.39	USD
16:53:23	EURGBP	SELL	-1300	FOREX	0.7635	GBP
16:53:14	FBAY	SELL	-60	STOCKS	26.41	USD
16:53:14	EBAY	SELL	-100	STOCKS	26.41	USD
16:52:58	GCQ2016	SELL	-1	FUTURES	1115.7	USD
16:52:54	GBPUKD	SELL	1950	FOREX		
16:52:06	GBPCNY	SELL	-17700	FOREX		
16:51:32	XOM	BUY	141	STOCKS		

✓ Order 11750 cancelled

ALGOTrader © ALGOTRADER



Our Global Clients



Our Global Team

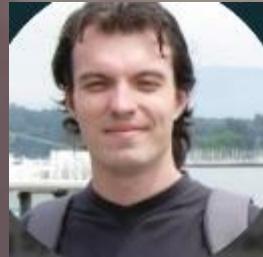
Robert Kolar



Ruben Fanjul Estrada



Igor Ustinov



Anna Baczulis



Marek Zganiacz



Jakub Chodorowicz



Andy Flury



Roger Langen



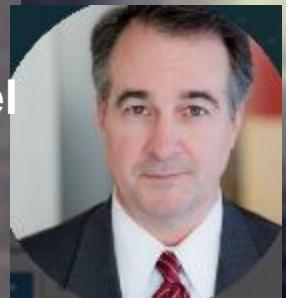
Daniele Salviani



Liz Wang



Richard Chmiel



Facts about AlgoTrader

The background of the slide is a photograph of a city skyline at sunset or dusk. The sky is filled with warm orange and yellow hues. Numerous lights from buildings, streets, and bridges are reflected in a large body of water in the foreground. The overall atmosphere is modern and dynamic.

Built Over
100
Trading Strategies

10
Different
Nationalities in
Our Team

80+
Global Client
Companies

200,000+
Lines of Codes

Office in
3
Different
Countries

5
Investors
Including 1 VC

15
People in Our
Team

Crypto Currency Intro

- What is a Crypto-currency
- What is a Blockchain
- What is Mining
- What is a Wallet

Crypto Currency Exchanges

- Market overview
- How do Crypto-currency Exchanges work
- What differentiates them from conventional exchanges?
- What is needed to trade



Opportunities & Risks

- Fragmented market
- Immature market
- Typical Issues
- Regulation

Crypto-currency APIs



Type of API's

- Market/Price data
- Historical data
- Order
- Account data
- Reference data

API types

- REST
- WebSockets
(Native, SocketCluster, PubNub, etc.)
- Financial Information eXchange (FIX)

intermediaries and libraries

- <https://coinigy.com>
- <https://coinapi.io>
- <https://www.cryptocompare.com/api>
- <https://github.com/knowm/XChange>

Automated trading of Crypto-currencies

- Technical Indicator Trading
- Arbitrage Trading
- Market Making
- Back-Testing



Example Trading Strategy



Medium-Term Trend Following



Exponential Moving Average Indicator



Trading Bitcoin



20-100 Orders Per Day

Oct



Live Data vs. Open High Low Close Bars



Live Demo

- Market data via Bitfinex Exchange WebSocket API
- Aggregation of live trades into 10 second Open-High-Low-Close Bars
- Use TA4J library to calculate Exponential Moving Averages (EMA)
- Place Orders via Bitfinex REST API

<https://github.com/andyflury/bitfinex-ema-trading>

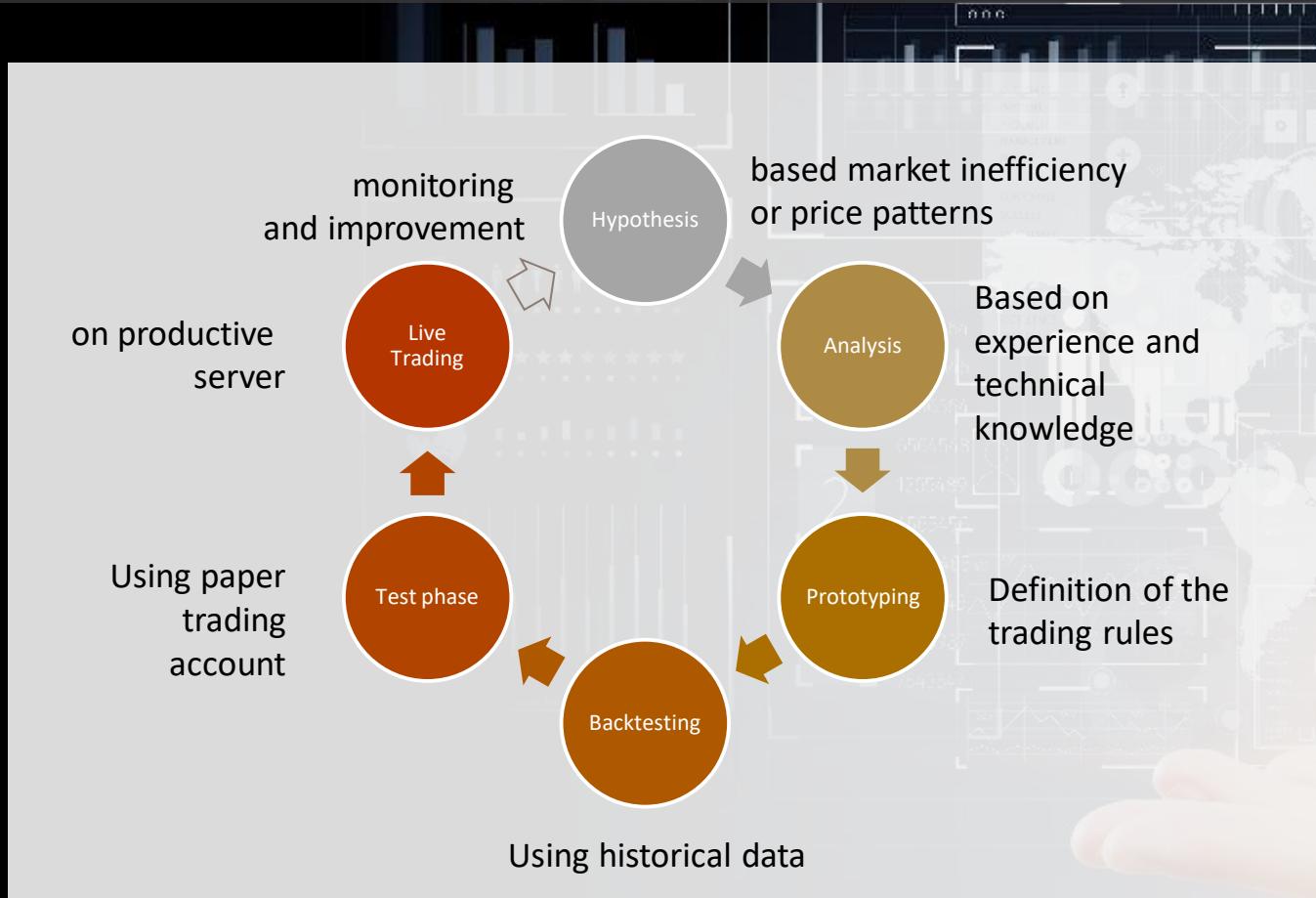
Roger Langen

Head of Projects (Zurich Office)

- 15 years of experience working as a software developer, business analyst
- Team, project and product manager at UBS Switzerland AG
- Responsible for IT development and strategic projects for Equity Finance in Switzerland



Trading Strategy Development Process



AlgoTrader Example Client Projects

- Crypto Brokerage, Execution Algos & Smart Order Routing
 - Crypto Arbitrage
 - Medium to Long Term Trend Following (CTA)
 - Technical Indicator Forex Trading
 - Equity Pairs Trading
 - Social Media Trading
 - Equity Market Making
 - Initial Public Offering



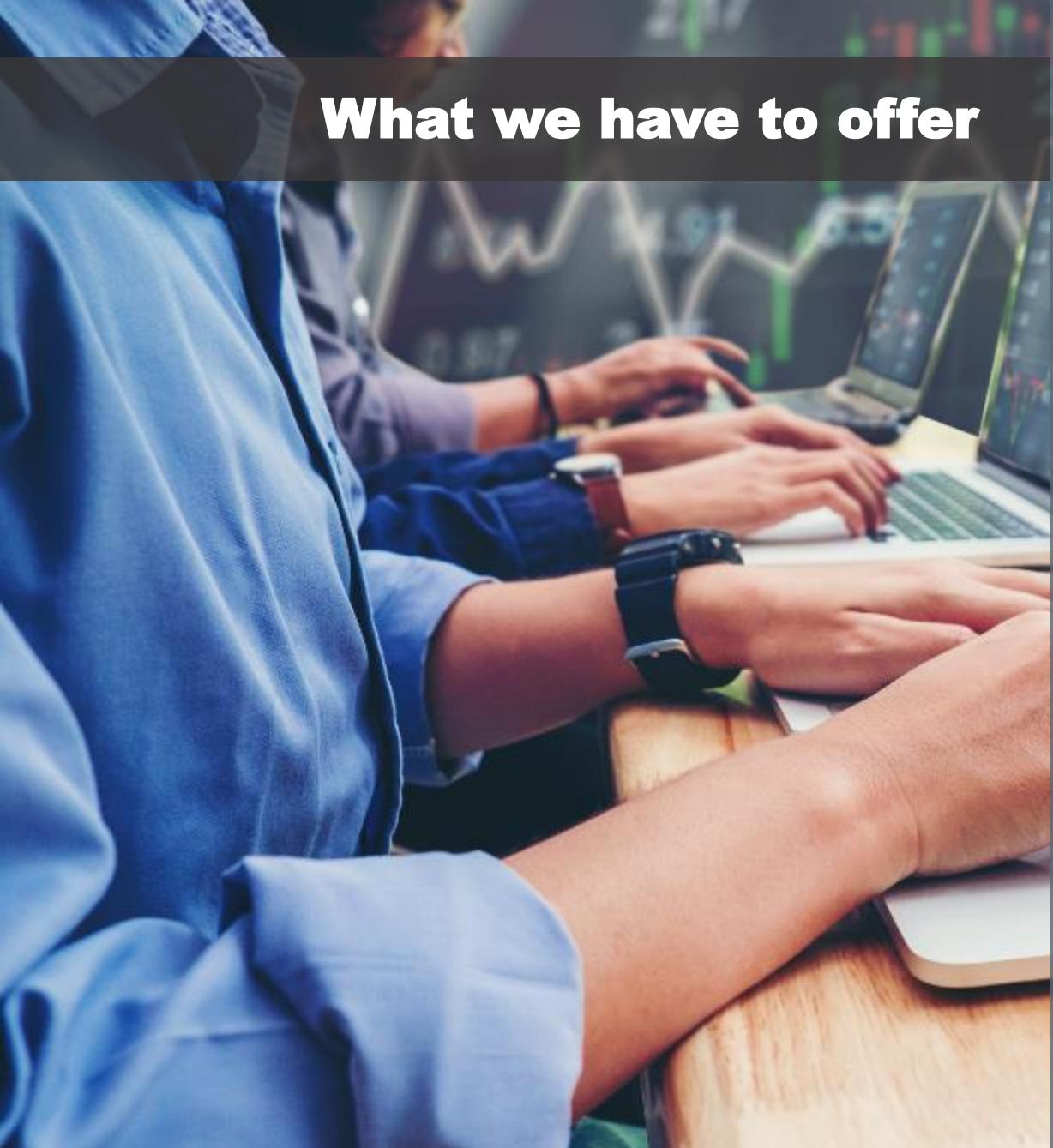
A close-up photograph of a person's hand, palm facing forward, holding a single gold Bitcoin coin. The background is dark and out of focus, showing what appears to be a person's face.

BTW
We are hiring!

Working at AlgoTrader

- Design and implement future releases of AlgoTrader. Implement features such as low latency order management, execution algorithms, smart order routing, event handling, big data management, messaging and business services
- Analysis, Design, Implementation and Testing of quantitative trading strategies based on client specific requirements
- Close collaboration with product management, development team, head of development and customers
- Keep current with industry trends and incorporates emerging best practices into the solution

What we have to offer



Agile Software Development Environment



Built by Software Development Professionals with Extensive Trading Experience



Competitive Compensation Package



High Energy Atmosphere, Opportunities for Growth



Significant Player in the Crypto Currency Market



Q & A

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