



First marketplace for quantitative trading algorithms



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Interview conducted by:
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CEOCFO: *Mr. Froehler, according to Quantiacs.com, “Our mission is to democratize quantitative finance.” How so?*

Mr. Froehler: Quantiacs empowers anyone to earn a fortune in their spare time. We provide freelancers from all around the world with the same infrastructure that they would find at a quantitative hedge fund:

comprehensive, high quality market data, open source software to create trading algorithms, and a platform to connect their algorithms to institutional investors in return for a licensing fee. With Quantiacs, anyone can become a quant from the comfort of their own home. For the first time in history, freelancers from all around the world participate in their trading algorithms' performance without giving up their intellectual property or investing their own money.

CEOCFO: *Have similar attempts been tried to bring this community together?*

Mr. Froehler: Crowdsourcing quantitative trading algorithms is a new concept. The traditional approach in quantitative finance is to employ the best researchers, scientists and engineers as quantitative analysts (aka, “quants”) who constantly build new trading algorithms for their employers. We turn this traditional model upside down – we trust in the wisdom of the crowd, and we empower the crowd to compete at scale. Our freelancers have the same tools at their disposal that professional quants at large hedge funds have. In the past, large quantitative hedge funds were the only ones with the resources required to empower quants, but now the tools of the trade have been democratized, and advanced machine learning libraries like TensorFlow are available for anyone in the world to use for free.

CEOCFO: *Would you walk us through how someone would use your platform?*

Mr. Froehler: Quantiacs provides free historical data, which is the basis of quantitative research. We currently have data of fifty of the most liquid futures in the world, macroeconomic data, and the stocks in the S&P500 index. On the software side we provide backtesting frameworks in two different programming languages; Python and MATLAB. Both are open source and allow our quants to check out the inner workings of the backtesting software. With these tools, our freelancers can perform the same quantitative research that's traditionally done at major quant hedge funds. As soon as they've developed a new trading algorithm, they can submit their source code to our marketplace. We compute the backtest and evaluate the trading algorithms constantly on new market data, as it becomes available. In the industry this is called the forward test. We use the backtest, the forward test, and a couple of other proprietary checks to assess the quality and robustness of all of the trading algorithms on our platform. We invest our own money in algorithms on our platform, and we make the best of the best available to institutional investors, and we split our profits 50-50 with the freelancers.

CEOCFO: *If someone is interested in the market and interested in analysis – this doesn't necessarily mean they have the skills to develop an algorithm. Who is turning to you?*

Mr. Froehler: Every startup is built around a contrarian truth. Our contrarian truth is that there is way more quant talent out there than actually ends up working in the industry. Less than one percent of all qualified quant candidates are ever

actually employed by quant funds. The other ninety nine percent end up doing something else in their career, even though they would make a great professional quant. When I was managing director of a quantitative research firm in Zurich, I had to send away ninety nine percent of all applicants at my company. There is overwhelming interest to become a professional quant, and yet only a small fraction of candidates will ever go pro. It is my mission and the mission of my company to empower the ninety nine percent. It actually does not take in-depth knowledge about finance or the markets to develop a successful trading algorithm. Predicting financial markets is a data science problem. It all boils down to the prediction of a time series and it does require some math, programming skills, and creativity to be successful, but there are a lot of smart people in the world. Most of our quants are students, data scientists, engineers, and university professors from all around the world. One of the big advantages of our crowdsourcing approach is the diversity of backgrounds and skills that we see in our quant community, which results in very diverse and uncorrelated trading algorithms.

CEOCFO: *What has been the response so far?*

Mr. Froehler: We currently have over six thousand quants on our platform with a ten percent monthly growth rate. We keep getting great feedback from our community. We host the largest algorithmic trading competition in the world with guaranteed investments of over two million every quarter. For compliance reasons I cannot disclose details about our trading operation other than that is profitable and an important source of income for our company. Last year we allowed the first institutional investors onto the platform and provided them with early access to the world's largest collection of quantitative trading algorithms. Our quants are excited about this step as it opens up an entirely new world to them. They can now manage institutional capital and make a decent income as a result. Unlike traditional quant funds, we don't charge our investors any management fees, only a twenty percent cut of the profits. Our quants participate with ten percent on all the profits their algorithms generate - with no financial risk. Traditional quant funds can't afford to compensate their quants with ten percent of the upside, but that's what we do at Quantiacs – we empower the quants.

“Quantiacs empowers anyone to earn a fortune in their spare time.”- Martin Froehler

CEOCFO: *What has changed in your approach over time as people have started to be involved? How have you altered or tweaked your approach?*

Mr. Froehler: We started with US equities but switched to futures pretty early on. We realized that we can offer institutional investors additional benefits with futures: Futures are highly liquid markets, which results in a high capacity of futures-based trading algorithms. Futures also provide a diverse universe of markets with a low correlation to important benchmarks. We also work constantly on the software side to lower the barrier of entry and to make our framework as intuitive as possible for our quants. When we first launched we supported only MATLAB, a very popular programming language for technical computing among mathematicians and engineers. After initial feedback from our community we have ported our toolbox to Python and now support both programming languages. We also see demand from our community for more market data, and we are constantly working to include new data sources on our platform.

CEOCFO: *How do you reach potential clients, customers or users?*

Mr. Froehler: Our best lead channel for quants is word of mouth. Students and engineers tell their friends about us, especially once they've earned money on our platform. Creating a working trading algorithm that manages a couple of million dollars is an achievement to be proud on and so they tell their colleagues about it. We are present on university campuses with events, competitions and meetups. Social media also works well for us. As thought leaders in quantitative finance and machine learning we have created and shared a lot of content with our community. We encourage our quants to share their personal experiences, successes, and failures with other quants. With respect to investors we are in the lucky position that they find us because there is a huge demand for quantitative trading algorithms, and we can offer the world's largest menu of quantitative trading algorithms at aggressively low fees.

CEOCFO: *What do you expect from Finovate in April? Who are you trying to reach? What is the story you want to tell there?*

Mr. Froehler: Quantiacs is the first marketplace for quantitative trading algorithms. I think the audience at Finovate will primarily be interested in our platform from an investor's perspective. Institutional investors can cherry-pick individual trading algorithms that best complement their portfolios. Asset managers can use our platform to outsource their research costs. A pension fund for example might hold eighty percent of its assets in US equities. Naturally their portfolio is correlated to the stock market. To them a fully managed quantitative trading algorithm that is negatively correlated to the stock market is a great addition to their portfolio. We offer institutional investors the ability to diversify their portfolios by combining strategies from the marketplace into products that are tailored to their individual investment objectives.

CEOCFO: *What, if any, type of regulatory agencies do you need to engage with or are you outside the realm?*

Mr. Froehler: Quantiacs is a commodity trading advisor registered with the CFTC and a member of the NFA. We operate like any other commodity trading advisor in terms of compliance, infrastructure and our trading operation. The main differentiator between us and other commodity trading advisors is our approach of crowdsourcing trading algorithms. Our quants are independent contractors, not employees.

CEOCFO: *What is ahead? If we talk a year from now what should we expect?*

Mr. Froehler: In a year from now Quantiacs will have grown into one of the largest quant communities in the world. This will allow us to offer institutional investors an even larger selection of proven, fully managed quantitative trading algorithms trading in many different asset classes. We will have new tools and data available for our quant community and a variety of new products for our investors.

CEOCFO: *What is the takeaway about Quantiacs for our readers?*

Mr. Froehler: Quantiacs creates a shared economy for quantitative finance. We are democratizing quantitative finance and asset management just like Uber democratized transportation and Airbnb democratized accommodation. While the idea of opening up closed industries isn't new, the impact that the sharing economy will have on the finance industry will be major, and it's long overdue.

