

# ALGORITHMIC TRADING CERTIFICATE (ATC): A PRACTITIONER'S GUIDE

## **ALUMNI STORIES**

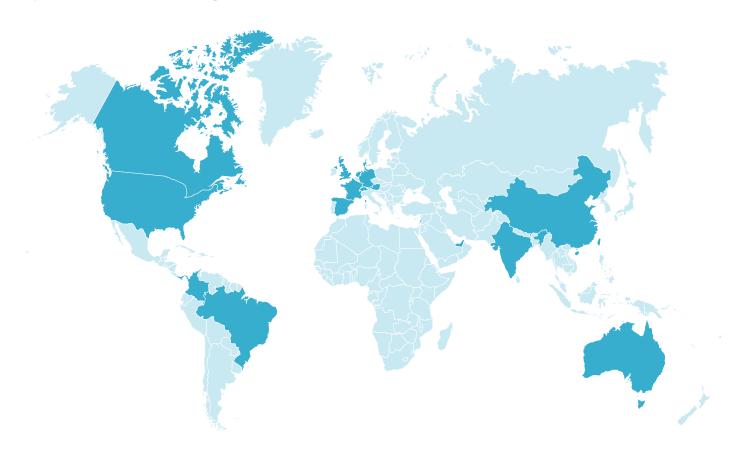


### **ATC Alumni Stories**

Across every cohort, participants highlight the seamless fusion of rigorous theory and hands-on application that defines the ATC experience. They consistently praise the highly experienced faculty, who bring both academic insight and real-world perspective, enabling students to deepen their understanding through direct interaction. Many point to the structured assignments and coding exercises as critical to internalising complex concepts turning lectures into deployable models. Graduates frequently describe the program as the missing bridge between quantitative ambition and practical trading strategy development, making the ATC not just a certificate, but a transformative step in their careers.

## A Global Community

The ATC is a truly global qualification, educating professionals throughout the world.



#### **Industries**

Obtaining the ATC is a solid demonstration of continuing professional advancement and one that will keep both you and your employer ahead of the competition. We are confident of the high quality and practical value of the ATC. It is a privilege to be able to bring this programme to so many.

ATC students have come from around the world and from across the banking, consulting and financial software industries, including:

- · ADIA
- · AMD
- · AMV Colombia
- · Balyasny Asset Management
- · Bank of America
- · Bank of International Settlements
- · Banque Cantonale Vaudoise
- · Baruch College CUNY
- BetterX
- · BRD Finanzagentur
- Capital One Finance
   Corporation
- · Credit Agricole CIB
- · Crossinvest (Asia) Pte Ltd
- · d-fine
- · Danmarks Nationalbank
- Durham University
- · Elwood Technologies
- · EnBW Energie Baden-

- Württemberg AG
- · FIS
- · Hedge Fund
- · Ibiuna Investimentos
- · Imperial College London
- · J.P. Morgan
- · Lloyds Banking Group
- Modus Asset Management
- Nordea
- · Nordea Bank Abp
- · NYC.
- · OCBC
- Pharmeasy
- · Ping An Bank (HK)
- · Point72
- Prop Firm
- Quantitative and Risk
   Consultants Ltd
- Consultants Ltd
- Ramon Llull University Esade Business School

- · Robeco
- · Santander
- · Sigma Squared Risk Advisors
- SmartestEnergy
- · Speak Slow
- · Standard Chartered Bank
- · Susquehanna Int'l Group
- TD Securiries
- The OPEC Fund for International Development
- · UCL
- University of Cambridge
- University of Essex
- · Van Lanschot Kempen
- · Yield Long Group Holdings Limited
- · Y-Intercept HK Ltd



## Positions held by ATC alumni

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- Analyst
- · Assistant Professor
- ·CFO
- Consultant
- · Data Engineer
- · Data Science
- Director
- · Executive Director
- Founder and Director
- · Head of Department
- · Head of Model Validation in London
- · Implementation Analyst
- Investment Manager
- · Lead Software Engieer
- · M.Sc. Algorithmic Trading

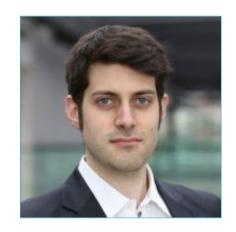
- · Market Analytics Officer
- · Market Risk Managment
- · Mathematics and Finance
- · Middle Office Manager
- Msc of Real Estate Economics
- · PhD Candidate
- · PhD student
- PMTS
- · Portfolio Manager
- · Power Analyst
- Pricing Analyst
- Principal Data Scientist
- · Quant Analyst
- Quant Developer
- · Quant Investment Manager
- · Quant Manager

- · Quant Researcher
- · Quant Strategist
- · Quant Trader
- · Risk Manager
- · Senior Analyst
- · Senior Engineer
- Senior Quantitative Analyst
- · Site Reliability Engineer
- · Snr Quant Analyst
- · Software Developer
- Software Engineer
- Statistics and Quantitative
   Modelling
- · Trader
- · Trader / Quant Analyst



#### Salvatore Stefanelli: Senior Quantitative Analyst, Standard Chartered Bank

COHORT 2



"What stood out to me was the mix of faculty, both academics and practitioners. They brought together the best of both worlds. They not only explained the theory behind what we were learning but also shared real-world experience and how it applies in practice. That combination was really powerful."

Salvatore: I've been working in financial services for around 10 years. I started as a consultant, then moved into permanent positions within investment banks in quant roles. More recently, I worked as a front-office developer aligned to prime brokerage, and then I transitioned into market risk analytics. Just recently, I switched sides, from the sell side to the buy side, and I've started working as a desk quant at a soon-to-belaunched hedge fund.

**Geoff:** Got it. So how did you first hear about the ATC program?

Salvatore: I came across the program through UBS training and marketing materials. I then researched the faculty and the course offering and was impressed with the scope. It really aligned with what I wanted to do, specifically, to make the transition from investment banking into asset management. I saw the ATC as a valuable stepping stone to support that career move.

**Geoff:** That makes sense. And with those expectations in mind, what did you find to be the most useful and practical aspects of the program?

Salvatore: What stood out to me was the mix of faculty, both academics and practitioners. They brought together the best of both worlds. They not only explained the theory behind what we were learning but also shared real-world experience and how it applies in practice. That combination was really powerful.

**Geoff:** Very true. I think the practical insight really complements the theoretical depth. Are there any aspects of the program you're still using in your current role?

Salvatore: Yes, definitely. Now that I'm working closely with investment professionals, I've had to get used to a whole new jargon and way of thinking, especially around trading strategies, algorithms, and coding. The ATC gave me a solid introduction to that world. Even though I'm still learning on the job, the foundation I got from the program has been extremely helpful. I'm now internalising what I learned and applying it practically on a day-to-day basis.

Geoff: What advice would you give to future delegates who are considering the program? Salvatore: My advice: really dig into the material. The lectures are great signposts, but you need to go deeper. Algorithmic trading has huge depth, and the more you explore the coding, maths, and theory, the more you'll get out of it. It's short, but you'll gain a lot if you put the effort in.

**Geoff:** So the more effort you put into it, the more you gain by the end?

Salvatore: Exactly. It's a stepping stone. It helps you get your foot in the door and shows others that you speak their language, that you have the potential to learn and grow in this space. When I was selected for my current role, I wasn't coming from a hedge fund background. But they saw I had a strong starting point and the willingness to learn. That's why they gave me the opportunity.

# Xaver Karl-Johann Muschik: Manager, d-fine

**COHORT 4** 



"I had two main objectives. First, I wanted to build a stronger theoretical foundation in algorithmic trading, to better understand how traders generate ideas and how a solid risk management framework should be structured."

**Xaver:** I'm currently responsible for the algorithmic trading risk management framework at our company, and we're really pushing forward with our algorithmic trading capabilities. So, I was looking for a program where I could broaden my knowledge in that area. I searched online and came across this program, and it seemed to be the best fit based on the curriculum, which I compared to other options out there.

Geoff: Brilliant. So, what was your objective in doing the ATC program, in relation to your role? Xaver: There were two main objectives. First, I wanted a stronger theoretical foundation in algorithmic trading, understanding how traders come up with ideas, and what a good risk management framework should look like. Second, I wanted hands-on experience in building algorithms, even just as a starting point. This program offered both of those, which is why I chose it.

**Geoff:** Great. When you went through the program, what did you find to be the most useful and practical aspects?

**Xaver:** First, the lecturers were very experienced, and it was great to be able to discuss specific topics with them during the sessions and get feedback based on their real-world knowledge. That was extremely helpful.

Second, the practical implementation aspect was really valuable. Being required to apply the theory helped deepen my understanding much more than just listening to lectures alone. And finally, the recommended reading list for

algorithmic trading was excellent. I still plan to use those resources to dive even deeper into the subject now that I've finished the course.

Geoff: Superb. Are there any aspects of the program that you foresee using in the future, particularly in your algo trading work?

Xaver: Yes, absolutely. As I mentioned, I'm focused on the risk management framework, and I've already identified areas we can improve thanks to what I learned in the program. For example, one area is how market liquidity impacts market risk when you're doing algorithmic trading. That's just one point, but there are several others I'll be incorporating. So yes, it's already been a great benefit to me.

**Geoff:** And if you were to give advice to future delegates considering the program, especially those not currently working in an algo trading firm, what would it be?

Xaver: I'd say: be prepared to invest the time. I had family and work commitments, which made it harder, but the more time you put in, the more you get out of it. The course has a rigorous theoretical foundation, and you'll go through a lot of material. You could get by just listening, but if you really want to benefit, you need to take time to read further, work through the maths, and apply it. That said, it's also a great course even if you're not currently in an algo trading firm. It helps you understand how to systematically design trading strategies, which is valuable for anyone in the trading environment.

#### Niccolò Bagnoli: PhD candidate, Quantitative Finance, ESADE Business School

COHORT 4



"The ATC provided exactly the bridge I needed between advanced financial theory and real-world strategy design. Over twelve focused weeks, the instructors unpacked market microstructure fundamentals, order flow dynamics and systematic risk modelling with a clarity that deepened and often challenged my PhD-level quantitative intuition."

Niccolò: I'm currently a PhD student in Quantitative Finance at IES Business School in Barcelona. My background is in mathematics and economics, and I also have a master's degree in finance, so a fairly scientific background. Last year, I spent around six months working as a quant researcher for a quantitative investment fund in Spain called Global Gradient, and I've held other research positions in the past. I really enjoyed the ATC because it had a strong professional focus and complemented my academic work well.

**Geoff:** When you went through the program, what did you find to be the most useful and practical aspects of the ATC?

Niccolò: I'd say there were two main things. The first was the office hours. We had two sessions every week – an early one and a late one – and they were really helpful because you could directly discuss ideas with the professors, get feedback on your project, or ask questions about the course material. The second was the small class size. That made a big difference because you had time and space to explore topics in depth and get more individual attention. Those were definitely the two aspects I found most valuable.

**Geoff:** I'm glad you mentioned that, because we do try to cap the number of attendees. Are there

any elements you're using now, or plan to use in future roles, that you feel more confident with since completing the program?

**Niccolò:** Yes, mainly my final project. I built a trading strategy based on higher-moment risk premia, which ties directly into part of my doctoral research. Higher-moment risk premia are something I'll soon be studying in more depth as I move into my second year, so the project was a really good way to apply the theory in a practical way. I think it's going to be a very useful foundation for my future work.

Geoff: That's exactly what the program focuses on – practical implementation – and that's where the project really comes into play. Final question: if you were to give advice to future delegates considering the program, what would it be?

Niccolò: I'd definitely say make the most of the faculty and the small class size. You really have the space and time to dig into specific topics or questions, and the professors are incredibly generous with their time and knowledge. I tried to attend almost every office-hour session, and it was always valuable – even if you don't have a specific question, you often pick up on things you hadn't thought about before. That would be my main piece of advice.

#### Paolo Mammola: Managing Director at SEDA Experts Limited

COHORT 4



"While the course is titled "Algorithmic Trading Certificate," it offers much more than that. It covers a vast range of financial and market theory."

Paolo: I enrolled in the Machine Learning Certificate in 2018 or 2019, led by Paul Bilokon. It was impressive, but soon after, I joined Citigroup as UK Chief Risk Officer. The role was intense, especially in the first year, so I couldn't keep up with the program and eventually had to leave it, staying at Citi for five years until July 2024. After leaving, I wanted to revisit that learning path – to explore how artificial intelligence can be applied to trading and, more importantly for me, investing. That's when I found the ATC program. It's a niche but highly regarded course within the quant community, and enrolling turned out to be an excellent decision.

**Geoff:** When you went through the program, what did you find to be the most useful and practical aspects of the course?

Paolo: The two instructors are incredibly good. They combine deep quantitative knowledge with strong programming expertise, especially in Python, and bring a practitioner's approach. The Machine Learning Certificate I took earlier was great but leaned heavily toward computer science and less toward the practical aspects of trading and investing. The ATC, on the other hand, struck the right balance between technical depth, practitioner experience, and a real-world market perspective – exactly what I was looking for.

**Geoff:** You mentioned that the program was tailored to your needs. Did it help you enhance your skills in algorithmic trading?

**Paolo:** That's an interesting point. While it's called the Algorithmic Trading Certificate, it actually includes a substantial component on portfolio and risk management. I've worked

in financial markets for 35 years, mostly in risk management – I was Group Head of Market Risk at Barclays Capital and then Group Head of Counterparty Credit Risk at Citi. This part of the ATC was especially useful. I told the instructors early on that I wouldn't focus my final project on algo trading, since I wasn't going to use that day-to-day. Instead, I focused on portfolio and risk management, as one of my current roles involves managing my own and my family's assets. I wanted to become more structured and professional in how I manage money. For my final project, I developed a model to efficiently select and rebalance ETFs in a quantitative way to achieve superior returns. I used two of the models we learned in the course and was awarded a merit certificate, which was very validating.

Geoff: The instructors, Nick Farouzi and Brian Healy, are very thorough when it comes to reviewing projects. They're fair but stringent, so you did very well to earn a merit. And finally, if you were to give advice to future delegates considering the program, what would it be? Paolo: While the course is titled "Algorithmic Trading Certificate," it offers much more than that. It covers a wide range of financial and market theory. Most participants are younger professionals aiming for quant roles at banks or hedge funds, which are highly competitive, and the ATC can definitely give them an edge. But it's also extremely valuable for risk managers. I wish I'd taken it earlier - it would have made me a better risk manager. So while the "algo trading" label is accurate, the course may actually undersell itself. It offers much more.

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