

ALEXANDER MASCOLO

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CURRENT	<i>MSc (by Research) Computer Science</i> University of Edinburgh <ul style="list-style-type: none">Fully funded, published research on compilers for data science.Open-sourced a query engine with code generation (🐙 sdql).	2024 – 2025 EDINBURGH 🇬🇧
EXPERIENCE	<i>Research Engineer</i> Tably <ul style="list-style-type: none">Applied R&D for large-scale distributed stream processing.Implemented conflict-free replicated data types (🐙 otto). <i>Software Engineer</i> Gyana <ul style="list-style-type: none">Greenfield development of high-performance analytics libraries.Funding by top VC investors, including the founder of Twitter. <i>Quantitative Developer</i> Macquarie Group <ul style="list-style-type: none">Strategist role in Quantitative Investment Strategies (QIS).Coded up strategies and improved the backtesting engine. <i>Quantitative Developer</i> Macquarie Group <ul style="list-style-type: none">Desk analytics role aligned with Options Market Making.Built visualisation tools to monitor trade execution latency.	2021 – 2023 LONDON 🇬🇧 2019 – 2020 LONDON 🇬🇧 2017 – 2019 LONDON 🇬🇧 2015 – 2016 SYDNEY 🇦🇺
EDUCATION	<i>BSc (Hons I) Computer Science</i> Australian National University <ul style="list-style-type: none">Interdisciplinary thesis on computer science and economic theory.National Merit Scholar (top 0.35%), joint prize with mathematics.Teaching assistant for Logic, Formal Methods, Information Theory. <i>Summer School in Logic and Formal Epistemology</i> Carnegie Mellon University <ul style="list-style-type: none">Fully funded, attended seminars on statistical machine learning.	2011 – 2015 CANBERRA 🇦🇺 2013 PITTSBURGH 🇺🇸
PAPERS	Amir Shaikhha, Mathieu Huot, Shideh Hashemian, Amirali Kaboli, Alexander Mascolo, Milos Nikolic, Jaclyn Smith, and Dan Olteanu. A semi-ring dictionary query language for data science. <i>Journal of Functional Programming</i> , 2025. forthcoming	
CODING	Python ●●●●● · Rust ●●●○○ · Scala ●●○○○ · C++ ●○○○○	
CITIZENSHIP	🇦🇺 Australian 🇬🇧 British 🇮🇹 Italian (triple) · eligible for 🇺🇸 US E-3 visa (H-1B not required).	