





Oliver Ip


Computer Science Finalist

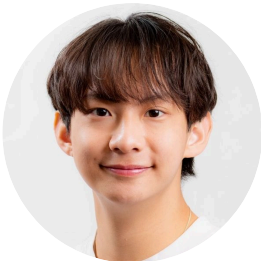
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 LinkedIn

 Github

 Portfolio



Profile

Computer Science finalist with hands-on experience in Python, TypeScript, and machine learning, building real-time analytics dashboards, AI-assisted applications, and production web systems. Pursuing quantitative finance career to apply computational expertise in capital markets and risk analytics.



EDUCATION

<b>BSc Computer Science</b> , <i>University of Bath</i> Predicted classification 2:1 • Key modules: Machine Learning, Reinforcement Learning, Data Structures and Algorithms	2022 – 2026
<b>International Baccalaureate</b> , <i>St. Paul's Co-Educational College</i> Final Grade: 42/45   Top Subjects: Mathematics, Chemistry, Economics	2016 – 2022
<b>A-Levels Mathematics</b> , <i>Pearson GCSE</i> Final Grade: A*	2021 – 2022

TECHNICAL SKILLS

<b>Finance &amp; Quantitative Tools</b> Time-series analysis, feature engineering, regression modeling, backtesting, TradingView API	<b>Programming Languages</b> Python, Java, JavaScript/TypeScript, C, SQL
<b>Web &amp; Frameworks</b> NestJS, Vue.js, React/Next, Node.js, Angular	<b>Data Science &amp; ML</b> scikit-learn, TensorFlow, PyTorch, NLP, Computer Vision
<b>Cloud &amp; DevOps</b> AWS, Docker, Kubernetes, Netlify	<b>Other Tools</b> Git JIRA, Tableau, Supabase, TradingView, Twilio, Photoshop, DaVinci Resolve, Blender





TECHNICAL PROJECTS

<b>Personal Project - BTCUSD/MSTR Monitor</b>  • Engineered a real-time BTC/USD dashboard with funding-rate, open-interest and multi-horizon momentum indicators; auto-refreshes every 5 min via Binance and TradingView APIs; built fail-over for API rate limits; evaluated 10 K+ signals daily using rolling-window tests, boosting directional accuracy by 15% over baseline.	08/2025 – Present
<b>Personal Project - Public Sentiment &amp; Macro Forecast</b>  • Developed an automated sentiment pipeline processing ~200 headlines/hr from Reuters/CNBC RSS and Google Trends; applied WoW z-score normalization to generate same-day directional probability and range forecasts; instrumented logging to achieve a 72% hit-rate vs. prior-close.	04/2025 – Present
<b>School Project - AI/Voice Analysis</b> • Built an AI-driven voice analysis backend using offline speech-to-text and a machine learning model for real-time risk classification. Working in a group environment taught me to delegate tasks and resolve conflicts constructively.	2023 – 2024
<b>School Project - Mobile App Development</b> • Developed a health and money tracker Android app with Android Studio, utilizing Scrum, Object Oriented Analysis and Android activities. Was the lead designer and beta tester of the team, involving bug fixing in Java, Photoshop UI design.	2022 – 2023

EXPERIENCE

<b>Science Tutor, Oxbridge Tutoring</b> <ul style="list-style-type: none"><li>Deliver A-Level Biology, Chemistry, and Physics lessons to secondary school students. Also Co-founded E-Concept (2021–2022), providing voluntary English, Maths, and Economics tutoring and holistic counseling to underprivileged youth.</li></ul>	03/2025 – Present
<b>Full-Stack Developer, StudentVenture</b> <ul style="list-style-type: none"><li>Collaborated with various startups to troubleshoot software bugs and deliver scalable front-end and back-end solutions. Gained hands-on experience working across diverse tech stacks while supporting clients in fast-paced, real-world environments.</li></ul>	08/2025 – 09/2025
<b>Software Engineer, Spark Layer</b> <ul style="list-style-type: none"><li>Contributed to the development and optimization of e-commerce solutions using PHP, Golang, and TypeScript.</li><li>Implemented new features, and played a key role in improving code quality to enhance user experience.</li><li>Collaborated with cross-functional teams to ensure timely delivery of high-quality software.</li></ul>	2024 – 2025
<b>Summer Internship, I-Charge Solutions International Company Limited</b> <ul style="list-style-type: none"><li>Received enriching on-site training, assisted with new software installation on electric vehicle chargers, and conducted diagnostic testing to resolve issues, equipping me with well-rounded technical and troubleshooting expertise.</li><li>Other tasks included data entry and SQL queries to organize maintenance records, as well as designing brochures and flyers—an experience that enhanced my creativity and prepared me for future software development roles.</li></ul>	06/2023 – 09/2023

LEADERSHIP & VOLUNTEERING

<b>Vice President and Software Developer, Team Lemme</b>  <ul style="list-style-type: none"><li>Built and scaled a full-stack POS &amp; kitchen management system with 99.9% uptime; shipped POS, kitchen screens, auth and analytics modules; reduced order-to-serve latency by 30% (Next.js, TypeScript, React, Supabase)</li><li>Developed the pop-up café financial plan forecasting £680 revenue and 83% gross margin (within £30 of actual) to repay a £500 loan; led team to win Overall Champion and Best Marketing Campaign—attracting visits from the Mayor and Vice-Chancellor.</li></ul>	03/2025 – 08/2025
<b>CSO &amp; Co-Founder, K30's Dekodify.io</b>  <ul style="list-style-type: none"><li>Co-founding AI-powered study tool that converts A-Level physics exam papers into structured MCQs with contextual hints and progress tracking. (React, Vite, Netlify, Python).</li><li>Built OCR and multimodal AI pipeline; training custom LoRA-adapted models (Qwen2.5-VL-7B) for supervised fine-tuning to replace commercial APIs and reduce long-term costs by 90% while maintaining accuracy. Engaging with STEM education officials in Hong Kong and UK for potential partnerships.</li></ul>	12/2024 – Present
<b>Core Member &amp; Volunteer Tutor, E-Concept</b>  <ul style="list-style-type: none"><li>Launched and ran a free tutoring programme in English, Maths and Economics for underprivileged youth; designed curricula, delivered weekly lessons and donated all proceeds to NGOs such as Food Angel, honing curriculum design and empathetic leadership skills.</li></ul>	2021 – 2022
<b>Technical Lead, Asklepian Medical Society</b>  <ul style="list-style-type: none"><li>Directed a team of technicians to produce polished video and graphic assets for student-run medical events; created multimedia content (intro videos, animations, posters) using DaVinci Resolve and Blender, boosting event attendance and engagement.</li></ul>	2020 – 2022
<b>Volunteer, RedCross, HandsOnHK, FoodAngel</b> <ul style="list-style-type: none"><li>Mentored at-risk youth; led a soap-recycling drive to create hygiene kits; conducted regular welfare visits to isolated seniors—enhancing community health and social support.</li></ul>	2016 – 2022

INTERESTS

<b>Languages</b> English (bilingual), Cantonese (native), Mandarin (fluent), Japanese (basic/N5)	<b>Sports and music</b> avid swimmer and cyclist, grade 8 ABRSM in piano and saxophone, cultivating discipline and focus.	<b>Creative pursuits</b> Developing software tools and AI models in free time to refine coding, statistical modeling and market-analysis skills.
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