Nimit Bakrania

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ACADEMIC BACKGROUND

University College London | *Meng. Computer Science*   **September 2019 - May 2023**
- **Grade**: First Class Honors (1:1 Expected)
- **Minor**: Engineering Mathematics in Finance
- **Positions**: Student Ambassador, Second-Fourth-year Representative of Computer Science
- **Relevant Modules**: Machine Vision, Advanced topics in Machine Learning (PHD), Multi-Agent AI

St John's Senior School | *A - Levels*   **September 2017 - June 2019**
- **Grades**: Mathematics (A*), Further Mathematics (A) and Chemistry (A)
- **Awards**: Head Boy, Shield of Academic Excellence, Mathematics Olympiad, Excellence for Contributions

WORK EXPERIENCE

TPICAP - COEX | *Quantitative Developer*   **April 2024– Current**
- Built a correlation and regression sheet to provide in-depth analysis of CIX's, including their roll and carry, all adjusted by volatility. This led to a 25% increase in PnL as further clients delivered these trades with COEX.
- Designed and integrated a meeting date swap system that flags current SDR trades automatically, doing so 7-10 minutes before Bloomberg for a market edge. This system also provides trades that are mean reverting, seasonally attractive, and are flagged by my copula-based back testing strategy.
- Incorporated a primer for pricing meeting date swaps for EM's using a novel approach based off FRA's.

Brevan Howard | Quantitative Developer   **June 2023 – April 2024**
- Created a dashboard to visualize the results of a back testing strategy, optimized to run automatically on market movements while considering fourier.
- Utilized seasonality coupled with other signal trading strategies to create a unique back testing method. This was run within 3 days of paper trading and improved the annual PnL by 22%, the monthly by 31%.
- Led the integration of machine learning into both portfolio exposure and trading strategies for the macro systematic team. This enhanced existing predictive capability by producing more potential trades.

Niantic | *Research Intern*   **September 2022 – May 2023**
- Requested by lecturer to complete my thesis research project in coherence with Niantic research.
- Utilised AWS Mechanical Turk to create a novel 10,000 image dataset in the field of spoofed photos.
- Building a local binary invariant liveness detection algorithm for texture extraction with an entire image.

Barclays | *Capital Markets Intern*   **June 2022 – August 2022**
- Improved the comp sheets for the DACH/UK clients by adding Bloomberg automation for trace values.
- Responsible for the weekly market update across DCM, covering all macroeconomic changes and deals.
- Performed a presentation on structuring a 10-year bond, with the bank using the deck in the client proposal.

Bloomfield Mental Health-UCL | *Software Engineer*   **August 2021 – May 2022**
- Proposed and designed a scalable solution architecture handling several thousand logs per second while consuming low system resources.
- Designed and implemented the architecture to support sounds in the IOS application, for use by new features.
- Trained and classified gestures using Hidden Markov models with adaptive thresholding.

Barclays | *Technology Developer Intern*   **June 2021 – August 2021**
- Automated an advanced payment processing system, reducing human intervention needed by 30%.
- Performed statistical modelling and quantitative analysis, for BARX electronic trading platform.
- Enhanced an E-sign platform using machine learning by implementing AWS services.

POSITIONS OF RESPONSIBILITY

University College London | *Teaching Assistant*   **September 2023 - Present**
- Training a group of 15 first years after recommendation from a previous mentor.
- Liaised with lecturers to ensure students had a strong grasp on the programming and algorithmic courses.
- Youngest student to teach discrete mathematics to summer cohort.

UCL Artificial Intelligence Society | *Tutorials Officer*   **September 2022 – Present**
- Head of tutorials for largest AI society in London, leading events such as the climate hack in partner with MIT.

SKILLS AND INTERESTS

LANGUAGES: English (Native), Gujarati (Fluent), Hindi (Fluent), French and Spanish (Conversational)
TECHNICAL SKILLS: Python, Java, C/C++, C#, SQL, HTML/CSS, JavaScript, R, Machine Learning
INTERESTS:
- Writing: Online journal 10+ LinkedIn articles on Technology, World Politics and Global Economics
- Sports: - Triathlete (Half-Iron man), Competitive climber
- Competitions: Participation in weekly Hackathons and online coding competitions (Leet code/Hackerank)