Alan Kowalczyk | MSc, MBCS

About Me

A motivated researcher specializing in Artificial Intelligence, Machine Learning, and Financial Technology with strong programming expertise and a passion for algorithmic trading.

Education

UCSI University PhD in Computer Science	Kuala Lumpur, Malaysia 05.2025 – Present
Caltech CTME Postgraduate Program in Artificial Intelligence & Machine Learning	Online 08.2024 – 09.2025
Abertay University MSc in Computer Science with Artificial Intelligence (Distinction, CGPA 3.88)	Dundee, UK 10.2023 – 11.2024
Adam Mickiewicz University Master's Degree in Astronomy	Poznań, Poland 10.2005 – 06.2011
University of La Laguna Erasmus Exchange Program (Astrophysics)	La Laguna, Spain 09.2009 – 01.2010
XXI Secondary School Secondary Education (Math, Informatics, Physics)	Poznań, Poland 09.2000 – 06.2004

Certifications

HarvardX Machine Learning and AI with Python	Online 04.2025 – 05.2025
HKUx FinTech Ethics and Risks	Online 01.2025 – 03.2025
HKUx Introduction to FinTech	Online 11.2024 – 12.2024
HarvardX Introduction to Data Science with Python	Online 10.2024 – 11.2024
StanfordOnline Databases: Relational Databases and SQL	Online 10.2024
MITx Introduction to Computational Thinking and Data Science	Online 10.2023 – 12.2023
MITx Introduction to Computer Science and Programming using Python	Online 05.2023 – 08.2023

Professional Memberships

Member of the British Computer Society (MBCS)

Research Publications

1: W. Dimitrov, K. Kaminski, H. Lehmann, P. Ligeza, M. Fagas, P. Baginska, T. Kwiatkowski, K. Bakowska, A. Kowalczyk, M. Polinska, P. Bartczak, A. Przybyszewska, A. Kruszewski, K. Kurzawa, A. Schwarzenberg-Czerny (2015).

V342 Andromedae B Is An Eccentric-Orbit Eclipsing Binary. Astronomy & Astrophysics, (Q1, Scopus Indexed)

2: K. Bensch, W. Dimitrov, N. Zywucka, M. Fagas, K. Kaminski, A. Przybyszewska, M. Maliczak, K. Kurzawa, A. Kruszewski, T. Kowalczyk*, W. Borczyk, K. Bakowska, P. Bartczak, T. Kwiatkowski, A. Schwarzenberg-Czerny (2014).

New Spectroscopy Of Multiple Stars RR Lyncis And HT Virginis. Information Bulletin on Variable Stars, No. 6121, #1, (**Q4, Scopus Indexed**)

*Published under former name.

3: Conference Poster:

N. Żywucka, **T. Kowalczyk***, W. Dimitrov, M. Fagas, K. Kamiński, W. Borczyk, K. Bąkowska, A. Rożek, R. Baranowski, P. Bartczak, R. Hirsch, A. Kruszewski, K. Kurzawa, T. Kwiatkowski, M. Maliczak, A. Przybyszewska, A. Schwarzenberg-Czerny (2011).

Spectroscopic Observations of Objects with Small Amplitude Radial Velocity Variations (Observacje spektroskopowe obiektów o małej amplitudzie zmian prędkości radialnych). Poster presented at the conference Utilisation of Small Telescopes II (Wykorzystanie małych teleskopów II), Opole, Poland, 16–17 June 2011.

*Presented under former name.

Languages

Polish: Native **English**: C1

Competences

Programming: C, Python, JavaScript

Financial Machine Learning, Algorithmic Trading, NLP for Finance, Financial Data Processing

Libraries: NumPy, Pandas, SciPy, Scikit-learn, Matplotlib, PyTorch, TensorFlow

HTML5, CSS, JavaScript, PHP, MySQL, PL/SQL

Operating Systems: Windows, Linux (Debian/Ubuntu)

Software: LibreOffice, LaTeX, GIMP

Soft Skills: Adaptability, Analytical Thinking

Interests

Artificial Intelligence, Machine Learning, Financial Technology, Algorithmic Trading

Astrophysics, Astro-Photography, Photography

Running: Completed marathons on all 7 continents and finished a 100km ultramarathon on first continent