

Yuman Song

South Kensington, London • yuman.song20@imperial.ac.uk • +44(0)7470499826

Education

Imperial College London
MSc Mathematics

South Kensington, London
2021-2025 (Expected)

Publications

Accepted papers:

- Jin H, Liu C, Liu K, **Song Y**, "**Analyzing Abnormalities in Age Attribute in GAN-Control.**" Accepted by International Conference on Software Engineering and Machine Learning (*CONF-SEML 2024*).

Project Experience

Research project: Gans control on face synthesis

July 2023 - Sept 2023

- Accepted by CONF-SEML 2024: "Analyzing Abnormalities in Age Attribute in GAN-Control."
- As a co-first author responsible for methodology design and manuscript writing
- Applied PCA to separate data and accurately measure the distribution of normalised data-points in latent space
- Calculated the core curve and done redunction on the high-dimensional space
- Visualized the distributions in 2-D vector space corresponding to different categories

M2R Program (Stochastic SIR modelling), Imperial College London

June 2023 - July 2023

- Constructed Agent-based simulation for Stochastic SIR model with complex combination and realistic consideration
- Processed and analysed data and results for comparison with different models in massive simulations
- Compared the statistics and inference the results using Machine learning methods(e.g gaussian process regression)

Developer Program, Accenture

April 2022 - May 2022

Internship experience in algorithm developing and testing, cybersecurity

- Defined technical requirements related to classified demands and scaled on-premise system infrastructure to the cloud
- Designed changes and testing to existing algorithm architecture
- Constructed UAT models with respect to detailed testing results and assessed the security maturity

Biomathematical project, University of Chinese Academy of Sciences

May 2021 - Oct 2021

- **Biomathematical model** set-up, relates to Covid-19 infectious rate and virus mutation
- Data moderation, full responsible for data accuracy

Algorithm Improvement Program

Jan 2021 - Mar 2021

- Made a research of Improvement of Algorithms in Cryptography which made innovation in analyzing the encryption process and risks
- Proceeded the **quantitative and qualitative** research methods to check the security and feasibility of the improved algorithm

Project Leader, University of Warwick

Feb 2020 - May 2020

- Applied several different **biomathematical** model using **python** to case study

Internship Experience

Plastic Omnium

Shanghai, China

Marketing and Communication Intern

June 2022 - Oct 2022

- Made marketing reports and updated the industry information (**data processing and extracting**)
- Guided booth constructions and designs for corporation image and communication
- Engaged in the project for CIIE (China International Import Exhibition) and gained appreciation

University of Chinese Academy of Sciences

Shanghai, China

Data Analyst Intern

July 2021 - Oct 2021

- Researched and processed on millions of data for bi-weekly reports by **python** and **MS excel**
- Web crawling to provide the verification of experiments and support the research conclusion
- The outcome was used as the verification of the hypothesis in the research

Liepin

Shanghai, China

Consulting Researcher

April 2020 - Aug 2020

- Delivered market reports and provided consultancies on candidate mapping
- Built recommendations for 20-30 job position with 70% pass in the initial interview and 30% pass in the final interview; served clients from banking, e-commerce, biochemical and manufacture industries