**Yicheng (Albert) Zhan**

Mobile: +44 (0) 7529150752 | E-mail: albertg2001@outlook.com | [Google Scholar](https://scholar.google.com/citations?hl=zh-CN&user=x2ptSYUAAAAJ) | [GitHub](https://github.com/AlberTgarY)

**EDUCATION**

**Ph.D. candidate (1st year) Nov. 2023 - Now**

**University College London - Computational Light Laboratory** **London, United Kingdom**

* **Core Interested Fields**: Computer-Generated Holography, Multi-task Learning, Deep Learning for Physics, Holographic Displays.
* **Thesis Title:** Advanced Algorithms for Next-Generation Computational Displays. (**Mentor**: Assoc. Prof. Kaan Akşit)

**M.Sc. in Computer Graphics and Vision Imaging                       Sep. 2021-Sep. 2022**

**University College London           London, United Kingdom**

* **Graduate Result**: First Class Distinction
* **Core Courses**: Image Processing, Computer Graphics, Machine Vision, Computational Modelling for Biomedical Imaging, Perception and Interfaces, Virtual Environments.
* **Dissertation Title**: [Urban Semantic Understanding](https://www.linkedin.com/in/yicheng-zhan-810a75232/details/education/1729450150852/single-media-viewer/?profileId=ACoAADottUwBHZVtYIz5Bo_1LQUnBeTdcjJ3c64). (**Supervisor**: Assoc. Prof. Melinos Averkiou)

**BS in Software Engineering and Computer Science** **Sep. 2018- Sep. 2021**

**King's College London           London, United Kingdom**

* **Graduate Result**: First Class Honors
* **Awards**: Received [King’s Undergraduate Research Fellowship](https://www.kcl.ac.uk/students/apply-for-the-kings-undergraduate-research-fellowship-kurf) for excellent academic performance.
* **Core Courses**: Machine Learning, Artificial Intelligence, Data Structure, Database System, Computer System, Software Engineering Development, Software Architecture and Design, Programming Language Design Paradigms
* **Dissertation**: [Slackbot Security Evaluation.](https://www.linkedin.com/in/yicheng-zhan-810a75232/details/education/1729450214410/single-media-viewer/?profileId=ACoAADottUwBHZVtYIz5Bo_1LQUnBeTdcjJ3c64) (**Supervisor**: Prof. Jose Such)

**WORK EXPERIENCE**

**Machine learning and Data Analyzation | Research Assistant July.2023- Now**

**Imperial College London London, United Kingdom**

* Designed advanced machine learning networks to enhance efficiency and accuracy in crime linkage analysis. Employed Siamese Autoencoder for dimensionality reduction and pattern recognition in behavioral data, aiding in identifying serial offenders and supporting victim credibility. (**Supervisor**: Assoc. Prof. Dalal Alrajeh)

**Computer Vision and Deep Learning | Research Assistant April.2023- Dec.2023**

**University of Leeds Leeds, United Kingdom**

* Developed efficient algorithms for fashion clothing segmentation and color extraction in computer graphics. Utilized advanced network architectures and knowledge distillation for precise and effective segmentation. (**Supervisor**: Dr. Raheleh Jafari)

**AI Programmer | Internship                                                      Jul.2020- Sep. 2020**

**Microsoft China         Beijing, China**

* Developed a universal web crawler to scrape daily news, simulating search engine behavior for an online news-feeding application.
* Analyzed large datasets to enhance user experience and information delivery. Achieved over 90% accuracy in classifying multi-topics news using an LSTM model. (**Supervisor**: Dr. Wenbin Cai)

**PUBLICATIONS**

* **Yicheng Zhan**, Qi Sun, Liang Shi and Kaan Akşit, *“Towards Configurable Learned Holography” 2024*. (In preparation) ([Web](https://arxiv.org/abs/2405.01558))
* **Yicheng Zhan**, Koray Kavaklı1, Hakan Urey, Qi Sun, and Kaan Akşit, *“AutoColor: Learned Light Power Control for Multi-Color Holograms” SPIE VR/AR/MR 2024*. ([Web](https://complightlab.com/autocolor_/))
* [Chuanjun Zheng](https://arxiv.org/search/cs?searchtype=author&query=Zheng,+C),[**Yicheng Zhan**](https://arxiv.org/search/cs?searchtype=author&query=Zhan,+Y), [Liang Shi](https://arxiv.org/search/cs?searchtype=author&query=Shi,+L), [Ozan Cakmakci](https://arxiv.org/search/cs?searchtype=author&query=Cakmakci,+O) and [Kaan Akşit](https://arxiv.org/search/cs?searchtype=author&query=Ak%C5%9Fit,+K), *ACM SIGGRAPH ASIA 2024 Tech Comm “Focal Surface Holographic Light Transport using Learned Spatially Adaptive Convolutions”*. ([Web](https://complightlab.com/publications/focal_surface_light_transport/))

**SKILLS**

Language skills: English (fluent), Chinese (native), Spanish (Intermediate)

Interests: Compose music ([Spotify](https://open.spotify.com/album/4KUbkeVXqBvADUDzgEXv4G?si=Sa__rPjuTuSO7YKU93S-VQ), [NetEase Music](https://music.163.com/#/artist?id=34534345)), cs2, indoor climbing.