

JACOB LIN

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EDUCATION

Imperial College London

Sep. 2018 – Jul. 2022

MEng Electrical and Electronic Engineering

London, UK

- Rank: 1st in Cohort (Governors' Prize), Grade: First-Class Honours

EXPERIENCE

Research Associate

Jan. 2023 – Present

Imperial College London

London, UK

- Researching 3D few-view reconstruction of clouds, supervised by Edward Gryspeerdt (Imperial College London) and Ronald Clark (University of Oxford).
- Developed a novel deep learning framework that integrates a deep stereo model with a 3D Convolutional Neural Network and an advection module, capable of capturing the shape and dynamics of volumes.
- Deployed a stereo camera array to collect real-world cloud data which was used to evaluate our method.

Research Intern

Apr. 2021 – Oct. 2021

Imperial College London

London, UK

- Worked on 2D object-centric learning via slot attention, supervised by Krystian Mikolajczyk (Imperial College London) and Francesco Locatello (Amazon).
- Developed a new framework for unsupervised object segmentation via adversarial training, achieving state-of-the-art ARI/MSD for datasets such as SHOP-VRB and ShapeStacks.

Engineering Intern

Jun. 2020 – Sep. 2020

Qualcomm

Remote, UK

- Developed data visualisation software and an interface for an internal simulation tool.

Undergraduate Teaching Assistant

Oct. 2019 – Jun. 2020

Imperial College London

London, UK

- Assisted with university classes and laboratory sessions for analogue and digital electronics.

Engineering Intern

Jul. 2019 – Sep. 2019

Blighter Surveillance Systems

Saffron Walden, UK

- Designed a Bayesian classifier for radar drone/bird classification using Fourier analysis.

PUBLICATIONS

Volumetric Cloud Field Reconstruction

Jacob Lin, Miguel Farinha, Edward Gryspeerdt, Ronald Clark

Under review, arxiv, Nov 2023

Cloud-Stereo: A Dataset and Benchmark for 3D Cloud Field Reconstruction

Jacob Lin, Edward Gryspeerdt, Ronald Clark

Under review, Nov 2023

AWARDS

Governors' MEng Prize: Top Overall Grades in Cohort (Imperial College MEng 2022)

Head of Department's Prize: Top Student in the Third Year (Imperial College MEng 2021)

Dean's List x4: Top 10% of Cohort (Imperial College MEng, 2018 – 2022)

Silver Medal: Awarded as part of Team Sweden in International Young Physicists' Tournament 2018 Beijing