Hao Chen

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EDUCATION

University of Birmingham — Birmingham, UK
Master in Computer Science, GPA: 80/100 (Distinction) — *Sep 2021 - Sep 2022*

- **Highlight**: Research Assistant at Birmingham 3D Vision Lab with Prof. Jianbo Jiao.

Massachusetts Institute of Technology — Online
MicroMaster in Statistics and Data Science, GPA: 88/100 — *Sep 2021 - Sep 2022*

Sun Yat-sen University — Guangzhou, CN
Bachelor of Engineering in Automation, GPA: 3.51/4.00 — *Sep 2017 - June 2021*

- **Highlight**: 4th Year: Grade: 95% (Rank 1/230)
- **Scholarships**: Sun Yat-sen University Scholarship for Excellent Students
- **Award**: Sun Yat-sen University Excellent Undergraduate Graduation Thesis Award

RESEARCH EXPERIENCES

Brion Environment of Technology in AI (BETA), ASML Holding N.V. — Shenzhen, CN
Group Lead — *Dec 2022 - now*

- Continued research on Machine Learning on Lens Heating project, under cASCAL production.

Noah's Ark Lab, Huawei London Research Center — London, UK
Researcher with Prof. Shanxin Yuan and Prof. Ales Leonardis — *Sept 2021 - Nov 2022*

- Research on effective reconstruction of 3D human heads from multi-view monocular images.

Institute of Optics and Fine Mechanics, Chinese Academy of Sciences — Shanghai, CN
Researcher with Prof. Nan Lin — *May 2021 - Sept 2021*

- Research of non-linearity between heat generation effects and lithographic lens topography.

Computational Lithography Research Group, ASML Holding N.V. — Veldhoven, NL
Researcher with Dr. Chaoqun Guo and Prof. Nan Lin — *May 2020 - May 2021*

- Research on correcting non-linear lenses distortion caused by the heating effect of long-term photolithography.

CONFERENCE EXPERIENCES

- **H Chen**, I Testini, Y Hou, C Qu, J Jiao
  360+X: A Panoptic Multi-modal Scene Understanding Dataset [NIPS 2023 Reviewing]

- **H Chen**, C Qu, C Chen, Y Zhang, J Wang, J Jiao
  Multi-view Self-supervised Disentanglement for Low-level Vision [ICCV 2023]

- R Yin, **H Chen**, et al.
  Expanding from unilateral to bilateral: a robust deep learning-based approach for predicting radiographic osteoarthritis progression [Osteoarthritis and Cartilage Reviewing]

- **H Chen**, C Qu, C Chen, J Jiao
  Geometry-Preserving War-Torn World Synthesise from the Peace World [CVPR 2022 Reviewed]

- **H Chen**, A Lattas, Q Ye, S Yuan, A Leonardis
  Hierarchical Articulated NeRF for 3D Human Rendering [CVPR 2021 Reviewed]

- **H Chen**, Z Jin.
  Low-Light Image Enhancement in the Frequency Domain [BMVC 2021 Reviewed]

- W Yuan, Y Lu, M Li, B Pan, Y Gao, **H Chen**, et al.
  Machine Learning Hotspot Prediction Significantly Improve Capture Rate on Wafer [IWAPS 2020]

Patent Experiences

- **H Chen**, Z Dai, Q Huang, B Ding, et al.
  An Object Detection Method for Optimal Scheduling of Shared Bicycles [CN113392799A].

- **H Chen**, We HU, Q Jia, M Liu, R Sun, J Wuu.
  Systems, Products, and Methods for Image-based Pattern Selection [WO2022037921A1]

- **H Chen**, Z Dai, Q Huang, B Ding, et al.
  Indoor Human Posture Detection-based Early Warning Method for Emergency of Elderly [Submitted]

Awards, Honors, and Scholarships

Kaggle Competition Master (2 Gold and 3 Silver Medals, Rank top 150/201,047)	Kaggle
Gold Medal of RSNA Screening Mammography Breast Cancer Detection (Rank 8/1687)	Kaggle
Gold Medal of RSNA 2022 Cervical Spine Fracture Detection (Rank 2/883)	Kaggle
First place in 2021 ASML Machine Learning Competition	ASML
First place in 2022 ASML Machine Learning Competition	ASML

Community Service and Association Experience

Regular Visit and Care For the Elderly	Guangzhou Nursing Home
Founder of University of Birmingham Algorithm Club	University of Birmingham
Deputy Minister of Department of Literature and Art	Student Union of SYSU
Team Captain of College Men's Basketball Team	Sun yat-sen University
Registered Second Level Athlete in China (Men 200M Record 23.4s)	China Sports Council

Technical Skills

Python – proficient, LaTeX – proficient, Cpp – basic, Git – proficient, Meshlab – proficient