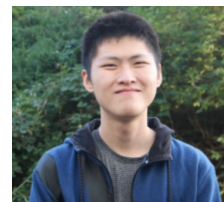


CURRICULUM VITAE

PERSONAL INFORMATION

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SELF-INTRO

Physics Masters graduate with a solid optical background. Familiar with light-based imaging techniques and nanophotonic principles. Designed, built and maintained optical setups during internships at AMOLF and ARCNL. Experienced with Python-based programming to analyze and present experimental data. I am eager to join Astrape Network's brilliant team to utilize optical technologies to deliver low latency solutions for data centers.

INTERNSHIPS

Advanced Research Center for Nanolithography MSc Thesis Aug. 2023–Aug. 2024
Materials & Surface Science for EUVL group, Supervised by Dr. Roland Bliem

- Investigated possible oxidation-based damage mechanisms caused by pulsed UV exposure to "reflective" surfaces. Found UV illumination to have negligible impact on thermal-driven oxidation.
- Operated and Maintained lab equipment under compliance. I independently operated vacuum and high-power laser (class 3b) systems under safety guidelines, with a responsibility of pre-use calibration and light maintenance. I have had no record of noncompliance.
- Built my own optical setup to address practical challenges. I built a laser-guidance system to accurately pinpoint UV exposure areas, leading to high accuracies for my experiments.
- Performed optical and elemental characterization of electronic materials. I studied copper thin films with an optical microscope and X-ray Photoelectron Spectroscopy (XPS).
- Analyze and interpret measurement data with programming to inform future experimental cycles. I wrote Python scripts to analyze data gathered from OM and XPS, which I then use to guide what my future research focus would be.

AMOLF Internship + BSc Thesis Jan. 2021–June 2021
Hybrid Solar Cells group, Supervised by Dr. Bruno Ehrler and Dr. F.R. Bradbury

- Analyzed the performance of an in-house Machine Learning Model (MLM) devised for locating optimal solar cell placement. I found the MLM have an accuracy of lower than 50%, demonstrating a need for further training and modeling.
- Creatively solve for unforeseen situations. I was able to gather experimental data outdoors despite COVID restrictions by developing an optical setup with procedures compliant to health guidelines.

EDUCATION HISTORY

MSc Physics & Astronomy University of Amsterdam Sept. 2021–Aug. 2024
Advanced Materials and Energy Physics (AMEP) track
Relevant coursework :
Nanophotonics, Programming for AMEP(Python), Quantum Optics, Surface and Interface Science, The Science and Technology of Nanolithography

BSc Liberal Arts & Sciences Amsterdam University College Sept. 2018–Aug. 2021
Physics track
Relevant coursework :
Numerical Methods (MATLAB)

OTHER EXPERIENCES

Secretary of 3D Printing club Amsterdam University College 2019-2021
Used CAD software (AutoCAD and TinkerCAD) for making 3D Printing designs and execute them. Actively contributed to building and maintaining 3D Printers. Documented meetings and progress of projects and maintain their accessibility to other members. Liaison-ed with university faculty for funding and balance technological capabilities with budgetary limitations.

SKILLS

Soft Skills : Analytical, Collaborative, Fast-Learner, Independent
Languages : English (Fluent), Mandarin Chinese (Fluent), Dutch (Limited, actively developing)
Software & Programming : Python, MATLAB, Mathematica, R

REFERENCES

— Dr. Roland Bliem (MSc Internship & Thesis Supervisor) : R.Bliem@arcnl.nl
— Dr. Bruno Ehrler (BSc Internship & Thesis Supervisor) : B.Ehrler@amolf.nl