

## EDUCATION

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2020 - 2023 **Master of Science, Industrial and Environmental Biotechnology** (GPA: 4.4/5.0)  
KTH Royal Institute of Technology, Stockholm, Sweden

### Relevant coursework:

- Degree Project in Biotechnology, Second Cycle
  - Genetic engineering of *E. coli* and *Synechocystis*, cyanobacterial cultivation, volatile compound analysis (GC-MS)
  - Presentation: <https://youtu.be/Obge6d8Qp48>
- Bioprocess Design
  - *E. coli* cultivation (600 L), *E. coli* culture simulation with SimuPlot (MATLAB)
- Downstream Processing of Biological Products
  - Investigating DSP of monoclonal antibodies (mAb)
- Metabolic Engineering
  - Flux balance analysis of nonane production from *E.coli* (MATLAB)
- Biocatalysis
  - Biodiesel production with *Candida antarctica* lipase B (CaLB)
- System Analysis and Life Cycle Assessment (LCA)
  - LCA of polysaccharide extraction from wheat bran with Icopt (Python)
- Molecular Enzymology
  - Investigating enzyme kinetics of alcohol dehydrogenase (ADH) and chymotrypsin
- Biomolecular Structure and Function
  - Investigating antituberculous drug binding site using PyMol
  - Inhibitor docking of tyrosine kinase with AutoDock Vina

2013 - 2018 **Bachelor of Science, Life Science** (GPA: 3.47/4.3, rank: 25/54)  
National Taiwan University, Taipei City, Taiwan

### Relevant coursework:

- Plant Physiology Lab.
    - Investigating the effects on germination and plant growth from nutrients and hormones, protein extraction and quantification
  - Biotechnology Core Techniques (Molecular Biology)
    - Genetic engineering of *E. coli*, blue-white screening, northern blot, Southern blot, protein expression, purification, enzyme activity assay, western blot
  - The Flora and Vegetation of Taiwan Lab.
    - Plant identification and classification, plant specimen gathering and preparation.
  - Biological Electron Microscopy
    - Sample preparation (ultramicrotomy) for electron microscopy (TEM)
  - Genetics Lab.
    - Creating hereditarily stable strains of *Drosophila* by cross-breeding
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## SKILLS

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- Laboratory:** Restriction cloning • Site-directed deletion • Colony PCR • Spectrophotometry  
Cyanobacterial cultivation • GC-MS • Ultramicrotomy for TEM
- Language:** Mandarin Chinese (native/C2) • English (advanced/C1)  
Swedish (Intermediate/B1) • Japanese (pre-intermediate/A2)
- Computer** - **Laboratory:** SnapGene • Benchling • OpenChrom • PyMol • MATLAB  
- **Office Work:** Microsoft Office • Google Workplace • Slack  
- **Illustration/Image Processing:** Inkscape • ImageJ • ChemDraw
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## EXPERIENCE

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153<sup>rd</sup> Infantry Brigade, 6<sup>th</sup> Army Corps, Republic of China Army  
Yilan Jinliujie Recruit Training Center, Yilan County, Taiwan

2018 **Private**

Compulsory military service.

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Department of Life Science Student Association  
National Taiwan University, Taipei City, Taiwan

2014 - 2016 **Graphic Designer**

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Fantasy Club

National Taiwan University, Taipei City, Taiwan

2014 - 2016 **Treasurer**

Financial management, property management & venue booking.

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National Wu-Ling Senior High School, Taoyuan County, Taiwan  
(now Taoyuan Municipal Wu-Ling Senior High School, Taoyuan City, Taiwan)

2013 **Editor**

Student-published reference work for the General Scholastic Ability Test, biology section.

2013 **Participant**

First-round competition of the national champion selection of  
International Biology Olympiad, finishing top 5% out of 5,609 competitors.

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