

# Zhehao Hu

## Curriculum Vitae

Hamburg, Germany — [hu\\_zhehao@hotmail.com](mailto:hu_zhehao@hotmail.com) — (+49)152-5322-4676 — [zhhzhehao.github.io](https://zhhzhehao.github.io)

## EDUCATION

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### M.Sc. Biology

Universität Hamburg  
Faculty of Mathematics, Informatics and Natural Science

10/2023 - 09/2025(expected)

Current Overall GPA: 3.9

#### Courses:

- Marine Deep-Sea Benthic Habitats and Biodiversity
- Molecular Parasitology
- Evolutionary Systematics
- From Population Genetics to Community Ecology
- Cellular and Molecular Immunology (November, 2024)

### B.Sc. Biology

Universität Hamburg  
Faculty of Mathematics, Informatics and Natural Science

10/2020 - 03/2024

Overall GPA: 3.0

#### Elective Courses:

- Biological Oceanography and Fisheries Science
- Methods of Open Field Ecology
- Biodiversity of Fungi
- Introduction of Geographic Information System (Ungraded)
- Molecular Methods of Animal Physiology
- Data Analysis in Ecology with R

#### Course works:

- Gradient analysis of floodplain grassland: species community (German)
- Understanding hemocyanin evolution using molecular and biochemical methods (German)

#### Fieldworks:

- Water quality surveying, Lower Saxony, Germany, 2022.
- Wild bird observation and bat population monitoring, Lower Saxony, Germany, 2023.

#### Bachelor thesis:

- How's *Wolbachia* doing? Various *Wolbachia* communities in the female-biased flea beetle *Altica lythri*.
- Supervisor: Prof. Dr. Susanne Dobler, Dr. Kim Rohlfing
- Grade point: 4.0

## Coursera Courses

#### Bioinformatics Specialization offered by UC San Diego

- Python Programming, Motif finding, Genome Assembly, Peptide Sequencing, Sequence Alignment, Dynamic Programming

#### Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital offered by Duke University

#### Data Science Specialization offered by Johns Hopkins University

- Data Analysis, Reproducible Research, Statistical Inference, Regression Models, Machine Learning

## EMPLOYMENT

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### Student assistant (HiWi)

08/2023 - 04/2024

Institute of Cell and Systems Biology of Animals, Universität Hamburg

Working Group "Molecular Evolutionary Biology" run by Prof. Dr. Susanne Dobler

- Assisted essential works in laboratory research and actively participated laboratory organization.
- Attended the DZG (German Zoological Society) conference in Kassel with a poster contribution.

Contact: Prof. Dr. Susanne Dobler, [susanne.dobler@uni-hamburg.de](mailto:susanne.dobler@uni-hamburg.de)

### Laboratory technician

06/2023 - 07/2023

Eurofins BioTesting Service Nord GmbH

- Internship and student job in laboratory qualified for food testing.

- Trained with fast-paced working environment and standardized laboratory procedures, operated ISO 17822 *in vitro* diagnostic tests (nucleic acid amplification-based examination procedures for detection and identification of microbial pathogens) in biosafety level 2 laboratory .

Contact: Gerrit Fabian Bauer, [GerritFabianBauer@eurofins.de](mailto:GerritFabianBauer@eurofins.de)

## CONFERENCE ACTIVITY

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### Poster contribution

**Detecting *Wolbachia* infection with Real-time PCR in female-biased flea beetle *Altica lythri***

5/9/2023 - 8/9/2023

115th Conference of the German Zoological Society

- Attended poster pitch talk session and presented intermediate result of my bachelor thesis.

## TEACHING EXPERIENCE

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### Animal Physiology

Teaching assistant (HiWi), 2022-2023

Universität Hamburg

- Supported practical courses of bachelor in laboratory with molecular biology experiment (Blood-cell counting, SDS-PAGE, ECG, Enzyme kinetics testing)

### Evolutionary Ecology

Teaching assistant (HiWi), 2023

Universität Hamburg

- Supported elective practical courses of bachelor in molecular laboratory (PCR, Gel-electrophoresis, Immunocytochemistry)

## PROFESSIONAL SKILLS

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### Research Skills

- Molecular Biological Tools (PCR, real-time PCR, RT-qPCR, Gel-electrophoresis, SDS-PAGE, Western Blot, Sequencing, Cloning, ICC)
- Bioinformatics analysis and programming (Phylogenetic reconstruction and analysis, Geographic information system Q-GIS, R, Python 3)
- Reproducible and collaborative research workflow (R, Python, Git, Markdown, LaTeX)

### Programming and Computing

- Data analysis, Data visualization, Genome assembly, Reproducible research and data management, Image and video analysis, processing and production
- Software competence: RStudio, Python 3, QGIS, SnapGene, Adobe Photoshop, Adobe After Effects, Adobe Animate, Adobe Illustrator, Adobe InDesign, DaVinci Resolve

### Language

- Chinese (Native Speaker), English (Professional Proficiency), German (Professional Proficiency)
- Japanese (Working Proficiency)

# CERTIFICATE AND COMPETENCE

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## SCUBA Diving

- PADI Open Water, PADI Advanced Open Water, PADI Rescue Diver

# PERSONAL ACTIVITIES

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## Freelancer Photographer

- Concert, conference, wedding, ceremony recording.
- Analog film developing, digitizing and processing.
- Short film production.
- Working Partners: Schneider Electric, CATL, CORNEX, OPESS, Biogena, Steinway & Son Hamburg, Elbphilharmonie & Laeiszhalle Hamburg, Hochschule für Musik und Theater Hamburg

## Diving Experience

**15-Day Diving Excursion, 2022**, Adriatic Sea, Croatia

- Focused on local marine biodiversity and ecosystem.
- Learned diving experiences, nautical and oceanographical knowledge from professional team members.

**Taiwan Diving Center, 2023**, Taiwan

- Experienced routine works of marine conservation, and local marine ecosystem monitoring with coral guardians.

# REFERENCES

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## Susanne Dobler

Prof. Dr.

Martin-Luther-King Pl. 3, 20146 Hamburg, Germany

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## Kim Rohlfing

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# LINKS

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Personal website: [zzzehao.github.io](https://zzzehao.github.io)

GitHub: [github.com/zzzehao](https://github.com/zzzehao)

LinkedIn: [linkedin.com/in/zhehao](https://linkedin.com/in/zhehao)

Social Media: [instagram.com/zhehao.hu\\_](https://instagram.com/zhehao.hu_)