Jiazhen Chen

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Education:

UC Irvine   **Aug. 2023-Present**
Irvine, CA, USA
Doctor of Philosophy, Chemical and Biomolecular Engineering

Cornell University   **Aug. 2021-Aug. 2023**
Ithaca, NY, USA
Master of Science, Chemical and Biomolecular Engineering   GPA: 3.95

East China University of Science and Technology (ECUST)   **Aug. 2015-Jul. 2019**
Shanghai, China
Bachelor of Engineering, Chemical Engineering   GPA: 3.64

Technische Hochschule Lübeck (THL)   **Mar. 2018-Jun. 2019**
Lübeck, Germany
Bachelor of Science, Environmental Engineering   GPA: 1.5

Research Experience:

Cornell University   **Jan. 2022-Jul. 2023**
Graduate Research, Prof. Matthew DeLisa

- Designed a system in *E. Coli* coupling the native translation machinery and the heterologous glycosylation system from *C. jejuni* through artificially engineered protein-protein interactions.

- Screened heterologous oligosaccharyltransferases for improved glycosylation efficiencies.

- Improved glycosylation efficiency/protein expression levels through plasmid optimization.

Technische Hochschule Lübeck   **Mar. 2019-Jun. 2019**
Bachelor Thesis, Prof. Dr. Ing. Michael Bischoff

Bachelor Thesis: Design, Construction, and Modeling of a Reactor with Near Plug Flow Characteristics

- Designed and constructed a coiled flow inverter (CFI) for student experiment purposes.
- Determined the mixing characteristics through tracer experiments.
- Modeled the reactor using a convection-diffusion model in MATLAB

Work Experience:

UC Irvine   **Aug. 2023-Present**
Graduate Research Assistant

Technische Hochschule Lübeck   **Nov. 2019-Jul.2020**
Teaching/Technical Assistant

- Provided teaching support for students in the "ECUST-THL" Environmental Engineering study program.
- Worked on improving a bubble counter for gas flow measurements using artificial neural networks.

Skills:

- Molecular cloning: Restriction Cloning, Gibson Assembly, Overlap Extension PCR

- Protein expression in *E. Coli:* Experienced in the design of *E. Coli*-based protein expression systems, with/without post-translational protein modifications.

- Protein purification skills: Affinity chromatography, HPLC

- Protein characterization skills: Mass Spectroscopy, Immunoblotting