# Yifei Ding

#### **EDUCATION**

Graduate – UCSD, San Diego

SEPT 2025 - PRESENT

· Master of Science in Bioengineering (Thesis)

Undergraduate - UCSD, San Diego

SEPT 2021 - JUNE 2025

· GPA: 3.844

· Major: Bioengineering: Bioinformatics

· Minor: Marine Science

High School - Crean Lutheran High School, Irvine

SEPT 2017 - JUNE 2021

· Project Lead The Way Engineering Cohort

· Summa Cum Laude

• GPA: 4.85

#### **PROJECTS**

### **Undergraduate Research (Analyze Data from Fjord Phyto)**

WINTER 2024 - exomes.sdsc.edu/fjordphyto/

- Conducted research with Prof. Terry Gaasterland to analyze Phyto Fjord Project data provided by Cusick Allison.
- Filtered data by regions, expression levels, and species to find trends.
- Contributed to the filtering and clustering of data to search for trends in phytoplankton population in low salinity-level fjord water and surface sea water.

# A machine learning model of bacterial translation efficiency from DNA sequence for protein production applications

JUN. 2024 - JUN. 2025 -

- Presented in UCSD Bioengineering Day(BE Day) and Undergraduate Research Conference (URC)
- Our research, conducted under the supervision of Daniel Zeilinski, focuses on employing machine learning models to transparently predict the translation efficiency of E. coli. These models facilitate the quantification of the effects of various features.
- evaluating and processing various data for model training, testing, and validation
- implementing components of the ML workflow, compared the difference between different types of data filtering, normalization, and representation methods to improve the performance of our machine learning model.

#### uSlime

 ${\tt SEPT.~2024-PRESENT-\it github.com/ReSummit/uSlime}$ 

- Co-developing uSlime, a smaller motion tracking hardware compatible with SlimeVR firmware.
- designing a CAD model for the tracker enclosure that can be 3D printed and remains lightweight.
- Improved electrical design through testing identified problems with the PCB design.

## **EXPERIENCE**

Network and Systems Administrator/IT Infrastructure Manager, International Sales Representative – Hangzhou Engrid Technology,

+1 (949) 981-8316 yid019@ucsd.edu github.com/dingyifei

#### **SKILLS**

### Programming/Bioinformatics

Languages: Python, Bash, C/C++, .Net VB, Java, HTML/CSS, R, Matlab, Octave Familiar libraries/tools: Git, Pandas, scipy, matplotlib, seaborn, numpy, Deseq2, fastqc, samtools

Familiar IDEs: JetBrains, Visual Studio, VS

Code

### **Engineering**

CAD Design G-Code Programming(CNC/3D Printer) Klipper 3D Printer Firmware Tuning 3D Printer Operation and Repair 3D Printing with Slicer Tuning (FDM/FFF and SLA/DLP) PCB Layout/Fabrication Laser Cutting

#### IT

Linux (Redhat, Debian)
Hypervisors (VSphere, Proxmox)
Container (Docker/Podman)
Domain and DNS Management
Github Workflow Automation
Weblate
Nextcloud ACL
OpenZFS
pfSense
UniFi
TrueNAS
LDAP
SAMBA ACL

### **LANGUAGES**

Mandarin Chinese (Native) English (Advanced)

#### **AWARDS**

#### **Provost Honors**

University of California, San Diego FALL 2021 - SPRING 2025

#### Phi Beta Kappa Honor Society

University of California, San Diego JUNE 2025 - PRESENT

# Invitation to Join Eta Kappa Nu (IEEE-HKN)

University of California, San Diego FALL 2022

# **Summa Cum Laude**

Crean Lutheran High School 2021

#### www.engrid.cn

2020 - PRESENT

- · Designed, deployed, and currently monitoring and maintaining
  - 1. on-site hyper-converged server cluster
  - 2. high redundancy 40Gbps networking infrastructure
  - 3. on-site UniFi wireless networks
  - 4. backup systems
  - 5. virtual machine templates
  - 6. uninterruptible power supplies (UPS) for critical systems
- · On-site server racking, configuration, and management (seasonal)
- · Conducted emergency data recovery and server/networking system repair

#### **Localization Core Maintainer** – *Klipper*, klipper3d.org

MARCH 2021 - PRESENT

- · Leading a dynamic team of over 200 translators
- · Developed scripts to integrate Weblate and MkDocs
- Review and refined source documentation with developers

# **Volunteer** – *UCSD Envision Makerspace*, jacobsschool.ucsd.edu/envision 2021 – PRESENT

- Repaired and maintained 3D printers.
- Provided guidance and answered questions related to 3D printers, laser cutters, and other specialized tools.

# California Scholarship Federation Lifetime Member

California Scholarship Federation 2021

# **PLTW Engineering Cohort**

California Scholarship Federation 2021

### **AP Scholar With Distinction**

College Board 2020, 2021