

# Alice Zheng

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## EDUCATION

### BOSTON UNIVERSITY

#### MS IN BIOINFORMATICS

Expected graduation: Spring 2022

Boston, MA

GPA: 4.0 / 4.0

### UMASS AMHERST

#### BS IN BIOLOGY

Dean's List (All Semesters)

Completed 2021 | Amherst, MA

Cum. GPA: 3.66 / 4.0

## COURSEWORK

Chemistry, Organic Chemistry

Biochemistry and Molecular Biology

Genetics, Evolution

Physiology

Human Genome Analysis

Evolutionary Genomics and

Bioinformatics

Data Structures

Data Science with R

Statistics

Linear Algebra

Machine Learning with Python

Applications in Bioinformatics

Biological Database Analysis

## SKILLS

### Biology:

Gel electrophoresis • UV spectroscopy

SDS-PAGE • Confocal microscopy • qPCR

GAL4-UAS expression system •

Immunochemistry • MS

Pipetting • ELISA • Blotting techniques

Sterile technique • Microscopy

Gas chromatography • HPLC

Film casting • Contact angle

DNA amplification • Bacteria culturing

Brain and gut dissection

Peptide analysis • Centrifugation

### Other:

Java • Python • R • Git

Excel • Word • Google Suite • UNIX

numpy • pandas • scikit

bwa • Jupyter notebook

## EXPERIENCE

### HARVARD MEDICAL SCHOOL PERRIMON LAB, LAB TECHNICIAN

Aug 2021 - Present | Boston, MA

- Studied the effects of cachexia on the body in *Drosophila* at different stages of tumor development via the Ras and Yorkie pathways.
- Dissected adult gut and brain for immunostaining to determine gene expression using microscopy
- Conducted behavioral assays for preference of sucrose, water, and protein.
- Grew 15 different lines, created crosses, and maintained and flipped at least 100 stocks every week.

### DISCORD BRAND AMBASSADOR

Feb 2021 - June 2021 | Remote

- Created a contact pipeline of student organizations that would benefit from using Discord software for communications
- Contacted and arranged meetings with organization leaders to discuss current communications channels and identified pain points
- Pitched platform adoption to organizational leaders and helped with the migration process to ensure understanding and satisfaction

### UMASS POLYMER SCIENCE AND ENGINEERING | CARTER LAB, RESEARCH ASSISTANT

Sept 2019 - Dec 2020 | Amherst, MA

- Studied dispersion and different substrate film properties of cellulose nanocrystals in hydrophobic organic solvents using various casting and drying methods.
- Assisted with research on surface-modified cellulose nanocrystals, performing tert-Butyloxycarbonyl surface modification reactions with several ratios of reactants and documenting hydrophobicity using contact angle.

### UMASS DACSS | PROGRAM RESEARCHER

Aug 2020 - Dec 2020 | Amherst, MA

- Contributed to the growth of the new Data Analytics and Computational Social Science masters program, working in a team focused on recruitment and outreach.
- Compiled data and contacts for feeder programs, as well as potential donors, board members and institutions.

### CS BIO CO. | RESEARCH INTERN

June 2016 - Aug 2016 | Menlo Park, CA

- Conducted sample analysis and purification, used analytical techniques including HPLC, GC, and MS.
- Worked in quality control of the R&D department, preparing laboratory reagents and samples as well as assisting in data analysis.

## LINKS

Github:// [alicealicealicez](#)

LinkedIn:// [ajzheng](#)