

## **EDUCATION**

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**WASHINGTON UNIVERSITY IN ST. LOUIS**  
**MS in Computer Science**

**Graduation: Dec 2022**

**WASHINGTON UNIVERSITY IN ST. LOUIS**  
**Major in Mathematics/Statistics; Double major in Computer Science**

**Graduation: May 2021**

## **WORK EXPERIENCE**

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**WASHINGTON UNIVERSITY IN ST. LOUIS**  
Michael Brent's Lab  
**Research Assistant**

**St. Louis, Missouri**

**Jan 2023 – Aug 2023**

**WASHINGTON UNIVERSITY IN ST. LOUIS**  
CSE 587A (Algorithms for Computational Biology)  
**Student Grader**

**St. Louis, Missouri**

**Oct 2021 – Dec 2021**

**WASHINGTON UNIVERSITY IN ST. LOUIS**  
CSE 247 (Data Structures and Algorithms)  
**Teaching Assistant**

**St. Louis, Missouri**

**Jan 2017 - May 2017**

## **PROJECTS / RESEARCH EXPERIENCE**

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### **Research Experience**

**Washington University in St. Louis**  
**Jan 2023 – Dec 2023**

#### **Module Enrichment and Gene Ontology Analysis as Downstream Analysis of Multi-Omics Integration**

- Transcriptome-wide association analysis with cardiovascular-related traits.
- Biological module enrichment analysis and Gene Ontology (GO) analysis.
- Implemented Nextflow pipeline to conduct downstream analysis on large Omics data.

**Washington University in St. Louis**  
**Jan 2022 – Dec 2022**

#### **Correlation Analysis on Gene Expression and Environmental Perturbation Data of *Cryptococcus neoformans***

- Data analysis on phenotype data.
- Differential gene expression analysis.
- Gene Ontology (GO) analysis.
- Biological network analysis and module enrichment analysis.
- Principal Component Analysis on RNA-seq data.

**Washington University in St. Louis**  
**Summer 2020 – Fall 2020**

#### **Market Making Algorithm**

- Assisted Professor Figueroa-Lopez's research on market making algorithm.
- Refactored the existing code for the future maintainability.
- Built visualization tools and analysis tools for the big data.
- Implemented volatility-aware algorithm to adjust next order size which improved expected revenue.

### **Open Source Project**

**Github**  
**Summer 2020**

#### **TEAMMATES (on-line teaching platform)**

Java / Java script / Angular

- Optimized UI for mobile compatibility.
- Refactored the search service after changing model type for components.
- Worked on accessibility support, especially on screen-reader support.