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# Victor Wang

# **EDUCATION**

# UNIVERSITY OF TEXAS AT AUSTIN

Turing Scholars Honors | BS in Computer Science, Mathematics

GPA: 3.81

Graduation date: May 2025

Organizations: Turing Scholars Student Association, UT Programming Contest

## LINKS

Google Scholar Github Codeforces LinkedIn

## SKILLS

Proficient:

Java, C++, Python

Familiar:

Android, R, Git, Bash, Vim

# **AWARDS**

- USA Computing Olympiad Platinum
- Codeforces Candidate Master
- AIME score 8
- Facebook Hacker Cup Round 2 Top 1500
- Google Code Jam Round 2 Qualifier
- Lockheed Martin Code Quest Champion
- CSEDM Data Challenge 5<sup>th</sup>

# COURSEWORK

Topics in NLP (Graduate)
Operating Systems (Honors)
Computer Architecture (Honors)
Data Structures (Honors)
Algorithms & Complexity (Honors)
Natural Language Processing
Principles of Machine Learning (Honors)
Autonomous Driving (Honors)
Autonomous Driving (Honors)
Autonomous Driving (Honors)
Applied Machine Learning

Real Analysis Algebraic Structures Number Theory Complex Analysis Mathematical Statistics Probability Linear Algebra Discrete Math (Honors) Numerical Analysis Stochastic Processes Decision Analytics Differential Equations

# **INDUSTRY**

#### **SCHLUMBERGER** | ROBOTICS DEVELOPER

May 2022 - Aug 2022 | Menlo Park, CA

- Created an application to allow a robot to locate a sound source and approach it
- Worked with sensors such as a lidar, microphone array, & event-based camera

#### **HACKERRANK** | PROBLEM CURATOR

Oct 2020 - Mar 2021 | Remote

- Designed, wrote and tested algorithmic problems for HackerRank coding interviews
- Collaborated with problem reviewers to best assess technical skills of developers

## RESEARCH

### **SCHOOL OF INFORMATION** | NLP RESEARCH INTERN

May 2023 - Present | Austin, TX | Advisors: Dr. Eunsol Choi, Dr. Min Kyung Lee

• Building a summarization model for case notes used by homeless services

## SCHOOL OF BIOMEDICAL INFORMATICS | RESEARCH INTERN

Apr 2021 - May 2022 | Houston, TX | Advisor: Dr. Degui Zhi

• Developed algorithms in haplotype matching and ancestral recombination graphs for applications in population genomics

#### **UNIVERSITY OF HOUSTON** | BIOINFORMATICS RESEARCH INTERN

Jul 2020 - Apr 2021 | Houston, TX | Advisor: Dr. Chandra Mohan

• Researched approaches to single cell clustering

## **PROJECTS**

#### **SYLLABLE-PBWT**

Apr 2021 - Jan 2022

• Devised and implemented an algorithm that performs <u>haplotype query search</u> with 100 times less memory usage than previous methods

#### **TOWEL-FOLDING ROBOT**

Sep 2017 - Jul 2018

- Built a towel-folding robot with a team of 4 under a mentor
- Used machine vision to find towel corners and send commands to the robot arm

#### MIT BATTLECODE

Jan 2020 - Feb 2020

- Coded an artificial intelligence bot to control virtual robots and manage resources
- Scrimmaged against competing teams to analyze and refine gameplay tactics

### **PUBLICATIONS**

- Wang V, Naseri A, Zhang S, Zhi D. Syllable-PBWT for space-efficient haplotype long-match query. *Bioinformatics*, Volume 39, Issue 1, 2023. doi:10.1101/2022.01.31.478234.
- Yue W, Naseri A, **Wang V**, Shakya P, Zhang S, Zhi D. P-smoother: Efficient PBWT smoothing of large haplotype panels. *Bioinformatics*, Volume 2, Issue 1, 2022. doi:10.1093/bioadv/vbac045.
- Wang V, Cicalese PA, Louis Sam Titus ASC, Mohan C. Polaratio: A magnitude-contingent monotonic correlation metric and its improvements to scRNA-seq clustering. bioRxiv. 2020. doi:10.1101/2020.12.20.423308.
- Cicalese PA, Rizvi S, Patibandla S, **Wang V**, Becker JU, Moos K, Yuan P, Zare S, Batal I, Roufosse CA, Clahsen MC, Mohan C, Nguyen H. MorphSet: Improving Renal Histopathology Case Assessment Through Learned Prognostic Vectors. *MICCAI* (2021). doi:10.1007/978-3-030-87237-3 31.