Kevin Xiao

xckevin@outlook.com | (425)-525-9964 | xckev.github.io

Education

University of Washington (Class of 2027)
Bellevue High School (BHS) (Class of 2023)
GPA: 4.0/4.0 (unweighted)
SAT: 1560 (Math: 800 | English: 760)
AP Classes: Calculus AB & BC, Computer Science, Statistics, Physics 1 & 2 & C, Language & Composition, Government, World History, Micro/Macro Economics, Biology

Awards and Accomplishments

Paul G. Allen School of Computer Science Admitted Student	2023
USACO (USA Computing Olympiad) Gold Division	2022-Present
AIME (American Invitational Mathematics Examination) Qualifier	2021 & 2022
AMC 10/12 (American Mathematics Competition) Distinction	2021
AP Scholar with Distinction	2022-Present
National Merit Commended Student	2023
Julie Kerr Memorial Math Prize (Top 2 AMC scores in BHS)	2022
Stanford Pre-Collegiate Summer Institutes	2019 & 2022
Wolverine Guard (100+ Volunteer Hours in 1 year at BHS)	2022 & 2023

Work Experience and Volunteering

Pathway Foundation Mayoral Internship
(Youth Organization for Civic Engagement, led by Bellevue City Councilmember Conrad Lee)

Digital Platform Project Lead	2019-Present
Tutoring Project Lead	2022-Present

- Led a team of 6 other high school interns in the design, development, and maintenance of two large-scale websites (www.pathwayus.org and www.tutoring.pathwayus.org) for the foundation
- Creates and maintains digital tools for other groups within the foundation
- Managed a free tutoring summer camp to fight educational inequality in summer 2022. Built a qualified tutoring team, designed curriculum, planned class schedules, reached out to students, and reported progress to students' parents. Helped 30+ underserved students in the Greater Seattle Area
- Tutored underserved students in various levels of math (prealgebra – AP Calculus)

Hui Lau Shan

Dessert Artist / Barista	2023-Present

- Makes handmade Hong-Kong style fruit desserts
- Efficient communication with customers and coworkers
- Working under pressure and time constraints

BHS Civic Engagement Club

Club President	2021-Present

- Connects high school peers civically to their communities
- Hosts discussions about American Creed and civic issues
- Coordinates community volunteering opportunities

Projects

CipherBot   2022
- Self-guided research project
- Open-source Discord bot written in Python that utilizes cryptographic algorithms
- Allows users to encrypt/decrypt messages with Diffie-Hellman Key Exchange and Public Key Encryption
- Emulation of mix-networks and homomorphic encryption for secure voting, a crucial part of modern political integrity
- Usage of many APIs such as Discord and coinmarketcap
- Project description: xckev.github.io/CipherBot
- Github Repository: https://github.com/xckev/CipherBot

SeamCarver   2021
- BHS Special Topics in Computer Science course project
- A content-aware image resizing technique to keep the most important visual information preserved while adjusting image dimensions
- Usage of Dijkstra's shortest path algorithm to delete the least important horizontal/vertical seam of an image, calculated by assigning each pixel an importance value called "energy" that takes into account differences in RGB values

Rush Hour   2021
- BHS Special Topics in Computer Science course project
- An Artificial Intelligence solver for the classic "Rush Hour" kid's car parking game
- Implementation of an A* algorithm using priority queues to find the next-best moves to achieving the winning game board in the least number of moves

WordNet   2021
- BHS Special Topics in Computer Science course project
- A semantic lexicon for the English language that groups words into sets of synonyms, returning words that are most related to each other
- Usage of rooted directed acyclic graphs and graph algorithms such as DFS and BFS to group words based on synonym and hyponym relationships

Extracurricular Activities

AAU Basketball	2013-Present
High School Basketball Team	2019-2021
Violin Soloist and Section Leader for Bellevue Chamber Orchestra	2016-Present
Math Club and Programming Club Member	2019-Present