Benjamin (Kai-Nan) Chang

benjamin.kn.chang@gmail.com
linkedin.com/in/benkchang
github.com/bkchang-97

- Incoming SWE intern at Visier
- Previous background in life sciences
- Yamaha music instructor on weekends

Work Experience

Prairie-Learn Developer (UBC Computer Science) May 2021 – Present

- Assisted instructor Cinda Heeren to develop course content for her new programming and algorithms course
- Designed 100+ exam questions on PrairieLearn (using Python/Java/C++ and HTML) with randomized question data generation and customized autograders to minimize academic dishonesty
- Created all lab content for the course: activities on OOP, data structures and computational thinking

Back-End Developer (UBC Earth & Ocean Science) Sep 2020 – Apr 2021

- Using Canvas API, helped course instructors transition their course resources online for remote learning
- Primarily worked on md2canvas: a package that allowed quizzes in Markdown to be exported to Canvas
- Made several additions such as a Python script that could extract all iClicker questions from PowerPoint slides and format them into a MC quiz ready for md2canvas

Teaching Assistant (UBC Computer Science) Sep 2019 - Present

- Worked for various courses: CPSC 103, 203, 221 (courses on programming, data structures and algorithms)
- Run weekly labs, mark assignments/exams and hold office hours to help students with difficult concepts
- Recently won the 2021 Undergraduate Teaching Assistant Award for outstanding work and service

Personal/Class Projects

Mood Calendar Jun - Jul 2021

- A pandemic-inspired project: an app allowing users to track their mental health throughout the week
- Each day the user ranks their mood with 1 of 5 colors, which would be recorded & displayed in a week view
- The project was a collaborative effort among friends, created in xCode using Swift and the SwiftUI library

Gym 18 (CPSC 304) June 2021

- Designed and implemented a database system to model the inner workings of a fitness centre like a gym
- Using Java + Oracle, we created an application providing access to a custom database with multiple functions through the GUI: registering accounts, booking training sessions, creating/following diet plans, etc.
- Allowed for different user types which offer different functionalities: master account, gym user, gym trainer

Perfect Pitch Jul - Aug 2020

- Created an educational game app for my music students in order to better adjust to online learning
- Using Kotlin and Android Studio, designed an audio-based chord guessing game for ear training
- Currently used by my Tom Lee music students and making adjustments based on feedback from parents

Education

Bachelors of Computer Science, University of British Columbia, Vancouver 2020 - Present
Bridging Module: Data Science
Anticipated Graduation: April 2023

Bachelors of Science, University of British Columbia, Vancouver 2015 - 2020
Combined Major In Science: Chemistry, Life Sciences, Environmental Sciences

Technical Skills

- **Programming Languages:** Python, Java, R, C++, HTML+CSS
- **Other Tools:** Excel, Github, Jupyter, VSC, IntelliJ, PyCharm, Oracle
- **Packages/Libraries:** Pandas, Numpy, scikit-learn, Junit, Swing, SwiftUI

Interests

- Video Games
- Music
- Badminton