Vanessa Chen

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Languages

Proficient: Java, Python, C

Working Competency:

HTML/CSS, JS, R

Familiar With: SQL, C#, MATLAB

Software

3D Design: Fusion360, SolidWorks, AutoCAD

Data Analysis: ImageJ, Fathom

Games / Robotics: Blender, Unity, Arduino

Coursework

Duke University

- Data Structures and Algorithms (Java)
- Computer Architecture (C)
- Intro to Data Science (R)
- Technology Commercialization

Planned (2020 Fall):

- Intro to Database Systems (SQL)
- Discrete Math for CS (Scheme)

The Nueva School

- Advanced Machine Learning (Python)
- Computer Security (Python)
- Computer Internals
- Virtual Reality (C#)
- CAD for Social Good (Fusion360)

Projects / Skills

Video Game Development: Mario-style Rolling Ball game (Unity), VR basketball shooting hoops game (Unity: C#), Pong Brickbreaker game (processing)

Team USA Figure Skater (Jan 2007-Present): Placed 10th globally at the Junior Grand Prix, and 3-time National competitor

Education

2019 – 2023 **Duke University, GPA: 3.96/4.0** Durham, NC
B.S. Computer Science, Psychology (Minor), Innovation and Entrepreneurship Certificate

2014 – 2019 **The Nueva School, UW GPA: 3.93/4.0** San Mateo, CA
High School Diploma, Gap year 2016-17 to figure skate with Team USA.

Work Experience

Technical Internships

May 2020 —- **RetinalCare, Machine Learning Consultant** Oklahoma City, Oklahoma
• Use Python to create machine learning models to classify patients at high risk for eye diseases (AMD, diabetic retinopathy)

May 2020 —- **Sunforge LLC, Web Development Intern** Somerville, MA
• Independently redesign website and create interactive product selection tool using HTML/CSS, JS, React and Next.js

Jun – Aug 2017 **GetInsured, Automation Engineering Intern** Mountain View, CA
• Saved the company 1,000+ hours of manual testing by automating an entire software portal's UI
• Ensured the quality and stability of a newly developed portal by leading script creation using Sahi, a JavaScript-based automation testing tool
• Ensured user-inputted data persisted to the backend using SQL

Other Internships

May 2020 —- **Vector Rideshare, UX Design and Campus Ambassador** Durham, NC
• Market / pitch to assist the growth of this student-run startup across campuses and improve / implement the rideshare app

Feb 2018 – Aug 2019 **Stanford University, Research Intern** Stanford, CA
• Co-authored paper and video in JoVe, leading peer-reviewed video journal
• Spearheaded the creation and testing of 50+ microfluidic devices to analyze metastatic cancer cell nuclei deformation
• Independently devised molecular movement simulations to visualize experimental data with Blender and MATLAB

Jul – Aug 2019 **CPrime, Product Marketing and Management Intern** San Mateo, CA
• Led campaigns to identify email marketing strategies and streamlined process for analyzing large datasets spanning 2019 by reorganizing the campaign setup structure, removing the need for manual data collection
• Initiated a more efficient marketing analysis method by creating a customizable excel template for future analysis

Teaching Experience

Jan 2020 —- **Duke University, Data Structures and Algorithms TA** Durham, NC
• Co-lead weekly discussion section of 20 students and hold office hours to help students work through projects/assignments
• Concurrently take computer science education research course to better teach CS and help students retain knowledge

Aug 2019 —- **Duke University, CoLab Studio TA** Durham, NC
• Assist 30+ students, faculty, and staff per week with 3D printing, laser cutting, electronics, and other fabrication tools in the creative maker space
• Repair and maintain 40+ 3D printers per week; recalibrating, unclogging, inserting new material, fixing camera issues

Leadership

Sept 2019 —- **Duke Sheroes, Co-President** Durham, NC
• Coordinated with industry professionals and Sheroes executive board to plan and organize events for women in STEM

Sept 2019 —- **Duke Impact Investing Group, Investment Analyst** Durham, NC
• Work on a team of 3 analysts to identify promising environmentally-focused startups, to provide seed funding from our Duke Endowment of $100,000