Kevin N. Chen

kevin.n.chen@yale.edu

linkedin.com/in/kevinnchen / 301-728-8622 github.com/k3vnchen / k3vnchen.github.io

Interested in building friendly software, developing VR/AR/XR, and researching HCI.

EDUCATION

Yale University 2023, Computer Science

Yale Computer Society, Yale Developer Student Club, Y-IEEE, Yale User Experience Society — New Haven, CT

- COURSES Introduction to Computer Science (CPSC 201), Data Structures and Programming Techniques (CPSC 223), Discrete Mathematics (MATH 244), Vector Calculus (High school)
- PLANNED Parallel Programming Techniques (CPSC 424), Linear Algebra and Matrix Theory (MATH 225)

EXPERIENCE

NIST Information Technology Laboratory (ITL) Head Mounted Display Laboratory

Research Intern — 6/2018 - 4/2019

- Developed a WebVR application to visualize over 180 3D mathematical surfaces in the NIST Digital Library of Mathematical Functions (DLMF) repository (*dlmf.nist.gov*)
- Intensively used the A-Frame and THREE.js JavaScript frameworks, became familiar with Oculus Rift, Oculus Go, HTC Vive, and Google Cardboard VR systems
- Received the 2018 Outstanding SHIP Poster Presentation Award
- Work presented at SIGGRAPH 2018: "Immersive Visualisation for Research, Science and Art" (*immersive-visualisation-bof.org*)

NIST ITL Applied and Computational Mathematics Division (ACMD)

Research Intern — 1/2016 - 6/2017

- Developed a Python program to perform the translation from the Mathematica eCF Encoding Continued Fraction database to Semantic LaTeX, part of the larger NIST DRMF Seeding project (*github.com/DRMF*)
- Created unit tests for 100% code coverage, met with researchers to discuss appropriate algorithms
- Co-authored the paper *"Semantic Preserving Bijective Mappings of Mathematical Formulae between Word Processors and Computer Algebra Systems,"* Published in the Proceedings of the 10th Conference on Intelligent Computer Mathematics, Edinburgh, Scotland, July 2017

PROJECTS

CourseTable Development Team / *coursetable.com & github.com/coursetable*

Yale Computer Society (Y/CS) — 9/2019 - Present

- Part of an 8 person dev team to maintain the CourseTable, a database of over 4000 Yale College and Yale graduate school courses with an interface for course selection, scheduling, and course ratings
- Develop in Python, Javascript, PHP, CSS, and Docker to maintain and add features to CourseTable based on student feedback, extensively use Git version control, also working to develop a mobile app

Bulletin VR / *devpost.com/software/bulletin-fq1kaz & github.com/k3vnchen/bulletin-webvr*

YHack 2019 — 10/2019 - 11/2019

- Used the A-Frame WebVR JavaScript framework, HTML Speech Recognition API, Python backend, and Flask to develop an online VR bulletin board for posting anonymous messages to tackle social anxiety
- Initially developed during YHack 2019, and won the overall Best Gaming/VR Hack

FIRST Tech Challenge Team #9450 / *Poolesville High School*

Senior Captain, President of STEM Community Outreach Programs — 6/2017 - 6/2019

- Led a student-run team through the engineering process to create a complex electrical robot from scratch
- Co-wrote a grant proposal, awarded the MSDE grant of $6,411 to fund community outreach programs
- Advanced to compete in the 2017-18 FIRST World Championship in Detroit, Michigan

Media Center Sign-In System / *Poolesville High School*

Lead developer — 12/2016 - 6/2017

- Developed Android application which replaced the pen-and-paper sign-in and book checkout system
- Used Android Studio and Java, processed schedule data of over 1,000 students in my high school
- Collaborated with staff and administration to determine the best front-end design and navigation methods

SKILLS

- Languages: C/C++, Python, JavaScript, Java, Racket, HTML/CSS
- UNIX/Linux, Git, Android Studio, LaTeX, Fusion 360, Adobe Illustrator, Adobe InDesign, Adobe XD