Kevin Chen

kevinnchen.com & 301.728.8622

kevin.n.chen@yale.edu

github.com/k3vnchen & in/kevinnchen

EDUCATION

Yale University, Computer Science, GPA 4.0/4.0

Yale User Experience Society, Yale Computer Society (y/cs), Yale Developer Student Club 08/2019 – 05/2023

COURSES Algorithms (CPSC 365), Linear Algebra and Matrix Theory (MATH 225), Discrete Mathematics (MATH 244)
Data Structures and Programming Techniques (CPSC 223), Object-Oriented Programming (CPSC 427)

WORK & EXPERIENCE

Yale Peabody Museum of Natural History

↪ Project Lead Developer 07/2020 – Present

- → Led application development for the COPIS Project, a photogrammetric 3D reconstruction system.
- → Developed, tested, and re-engineered camera path control and image capture application.
- → Utilized game development techniques to implement and optimize visualizer viewport using OpenGL.
- → Established quality management and programming methods for consistent design and methods.
- → Worked with the Head of Biodiversity Informatics to establish project plans and direction.

↪ Software Developer Intern 06/2020 – 07/2020

- → Designed and developed 3D visualizer for the five-axis camera gantry in the COPIS application.
- → Researched CAD software paradigms to implement graphics and GUI with PyOpenGL and wxPython.
- → Familiarized with source code of C++ desktop applications PrusaSlicer and Slic3r.

Source Development Hub

↪ Data & Engineering Intern 06/2020 – Present

- → Worked with a New Haven-based social enterprise to develop a data aggregation platform and a state database of affordable housing for the Connecticut Department of Housing.
- → Developed and automated a pipeline for extracting and geocoding 7,000+ housing program and subsidy records from unstructured datasets using Python into an SQL database.
- → Pitched and established data processing methodologies to executives and data team academics.

NIST High Performance Computing and Visualization Group

↪ VR Research Intern 06/2018 – 04/2019

- → Developed WebVR app to visualize 180+ 3D models in the NIST Digital Library of Mathematical Functions using A-Frame & three.js JavaScript frameworks, and Oculus Rift and HTC Vive VR systems.
- → Awarded the 2018 Outstanding Poster Presentation award, and youngest ever intern in mentor's lab.
- → Work presented at SIGGRAPH 2018 talk *"Immersive Visualisation for Research, Science and Art"*.

NIST Mathematical Analysis and Modeling Group

↪ Software Intern 01/2016 – 06/2017

- → Developed Python scripts to translate 1,300+ formulae from Mathematica to semantic LaTeX.
- → Co-authored the paper *"Semantic Preserving Bijective Mappings of Mathematical Formulae between Word Processors and Computer Algebra Systems,"* published in the proceedings of CICM 2017.

PROJECTS

BulletinVR

↪ devpost.com/software/bulletin-fq1kaz 10/2019 – 11/2019

- → Developed a VR bulletin board website to post anonymous messages and tackle social anxiety.
- → Made with A-Frame JavaScript framework, HTML Speech Recognition, and Python Flask backend.
- → Won the Best Gaming/VR Hack at YHack 2019, out of 147 submissions and over 400 participants.

Media Center Digital Sign-In System

↪ Lead Software developer 12/2016 – 06/2017

- → Developed Android app for student sign-in and book checkout system in high school media center.
- → Processed and presented schedule data of 1,000+ students using Android Studio and Java.
- → Collaborated with school staff and admin to determine front-end design and navigation methods.

SKILLS

LANGUAGES Python, C, C++, JavaScript, Java, R, HTML/CSS
TOOLS UNIX/Linux, Git, OpenGL, wxWidgets, Android Studio, LaTeX, Fusion 360, Illustrator, InDesign, Figma