Kevin Chen

kevinnchen.com & 301.728.8622

kevin.n.chen@yale.edu

github.com/k3vnchen & in/kevinnchen

EDUCATION

Yale University

B.S. Computer Science (GPA 4.0/4.0)

08.2019 - 05.2023

VP of Engineering of UXSociety at Yale, Design Chair of Yale Computer Society

Relevant Coursework: Algorithms, Data Structures, Systems Programming & Computer Organization, Advanced Topics in Computer Graphics, Discrete Mathematics, Linear Algebra & Matrix Theory

EXPERIENCE

Peabody Museum of Natural History 07.2020 - Present

Project Lead Developer (copis3d.org)

- → Led the development of the COPIS3D client, a desktop application which controls a multi-camera photogrammetric 3D reconstruction system, using wxPython and OpenGL.
- → Improved rendering performance by migrating from fixed function to modern OpenGL using GLSL shaders and instanced rendering. Utilized the pub/sub model and MVC design pattern.
- → Designed and implemented essential features such as path generation, orientation controls, contextual property panel, and overhauled general interface and controls to improve usability.

→ cont.

Software Developer Intern

06.2020 - 07.2020

- → Developed and improved the viewport for a photogrammetry application using Python and OpenGL.
- → Familiarized with CAD software by researching FOSS such as PrusaSlicer, Slic3r and PrintRun.
- → Practiced Agile and Scrum in 1-2 week sprints in a team of 3 developers.

Source

Development Hub

06.2020 - Present

Data and Engineering Intern

- → 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 which extracted and geocoded 10,000+ housing program and subsidy records from unstructured datasets using Python into an SQL database.

NIST ITL

VR Research Intern

06.2018 - 04.2019

- → Developed accessible VR website to visualize 180+ gITF equation models in the <u>NIST DLMF</u> using A-Frame & three.js web frameworks and Oculus Rift, HTC Vive, & Google Cardboard VR systems.
- → Awarded the 2018 Outstanding Poster Presentation award. Youngest ever intern in mentor's lab.
- → Work presented at SIGGRAPH 2018 BoF "Immersive Visualisation for Research, Science and Art".

NIST ITL

Software Intern

01.2016 - 06.2017

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

PROJECTS

Bulletin VR

Developer and Designer (devpost.com/software/bulletin-fq1kaz)

10.2019

- → Developed VR message board website to share anonymous messages and tackle social anxiety using JavaScript, A-Frame WebVR framework, and Web Speech API. Designed logo and all assets.
- → Won the Best Gaming/VR Hack, out of 147 submissions and 400+ participants, at YHack 2019.

FTC Robotics

President and Senior Captain

06.2017 - 06.2019

- → Secured \$6,400+ via MSDE grant, funding STEM outreach programs for underrepresented students.
- → Led team through engineering design process, designed and tested a nationally-competing robot.

Digital Sign-In

Lead Developer

12.2016 - 06.2017

- → Developed Android app to replace school's manual sign-in system using Android Studio and ADB.
- → Processed, verified, and presented schedule data of 1,000+ students using Java.

SKILLS

Languages

Tools

C++, C, Python, Java, JavaScript, Scheme, HTML, CSS

UNIX, Git, OpenGL, GLSL, wxWidgets, Visual Studio, LaTeX, Illustrator, InDesign, Figma