

Kevin Kim

(401) 651-9484 | kevink856@gmail.com | kevinkim.org | linkedin.com/in/kevink856

EDUCATION

University of California San Diego

Sep 2021 - June 2025

Bachelor of Science in Computer Science

La Jolla, CA

Coursework: Advanced Graphics, Computer Security, Operating Systems, Databases, Data Structures, Algorithms

Extracurriculars: CSES Open Source (Board), CSES WebDev, ACM, Video Game Design, Varsity Esports

GPA: 3.70

EXPERIENCE

TrustThink

Jan 2024 - June 2024

System and Security Engineering Intern

San Diego, CA

- Developing a FIPS 140-3 cryptographic API in **C/C++** and **OpenSSL** that supports encryption, auth, etc
- Providing easy API integration for developers with an **SDK** in C++ and multiple emulators for example usage
- Ensuring **100%** test code coverage for all libraries with **GoogleTest** for units and **FuzzTest** for memory checks
- Maintaining a pen-test environment in **Kali** with clang-tidy, Valgrind and Binwalk for static and dynamic analysis

CSES WebDev

Aug 2023 - Dec 2023

Software Engineering Lead

La Jolla, CA

- Led a team of **5** developers and designers for CSES WebDev's website using **React**, **Python** and **PostgreSQL**
- Ensured security for AWS **S3** and **RDS** services by configuring VPC subnets to internal dev and prod scopes
- Reduced feature bugs by **90%** with over **100** automated **unit** and **integration** tests using **Github Actions**

University of California San Diego

May 2023 - Dec 2023

Instructional Assistant

La Jolla, CA

- Taught and led **2** sections for First Year Experience to provide first years campus resources and general guidance
- Supported over **30** students in **40+** office hours for professional and academic advice, referring specific resources
- Assisted fellow discussion leaders with content and material by providing powerpoints and day plans in advance

Thoth Coding

Dec 2019 - June 2021

Co-Founder

Barrington, RI

- Co-founded an organization with 3 peers to virtually teach programming basics to over **600** students globally
- Co-developed several interactive **Java** programs to provide practical examples of OOP, API use, syntax, etc

PROJECTS

Raytracer | *C++, Embree, FreeImage, GLM*

- Developed a path-tracing renderer in **Embree** that supports ray-traced, analytical, direct and indirect lighting
- Used BVH hierarchy and multithreading for **99%** optimization, with random sampling and antialiasing for realism

EloEdge | *Python, pandas, R, Express, MongoDB*

- Created an API for a client to turn **13** years of **12000+** past and present college football games into Elo ratings
- Achieved **60%** accuracy in predicting game outcomes using an error function with custom k-factor and modifiers

PantryPal | *JavaFX, MongoDB, Gradle, JUnit, Docker*

- Developed a full stack recipe app in a team of **6** with **GPT-3** and **Whisper** to turn voice commands into recipes
- Reduced bugs by **90%** with over **200** unit and integration tests on CI/CD and by E2E testing BDD scenarios

Graphical Sort | *Java, Swing, AWT*

- Engineered an animation program to visualize how sorting algorithms work, utilizing Java Swing's **Timer** steps
- Supported over **800** animation speeds and **6** algorithms, and refactored **1000+** LoC to adhere to SRP and DRY

TECHNICAL SKILLS

Languages: C++, C, C#, Java, JavaScript, Typescript, Python, HTML/CSS, R, SQL, Haskell, MATLAB

Frameworks: Express, React, OpenSSL, OpenGL, GoogleTest, FuzzTest, Unity, Embree, Django, JavaFX, JUnit

Developer Tools: Git, Linux, AWS, Docker, CMake, LLVM, Valgrind, GDB, Binwalk, VirtualBox, Gradle, Postman