Miles Kang

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github: github.com/kilometerskang portfolio: kilometerskang.github.io/me

EDUCATION

University of California, Los Angeles (UCLA) Computer Science, B.S. / GPA: 3.78

Expected June 2022

- Relevant Coursework: Data Structures & Algorithms, Computer Organization, Discrete Structures, Operating Systems, Computer Graphics, Software Construction Lab, Abstract Linear Algebra, Applied Numerical Methods, Logic Design of Digital Systems, Algorithms & Complexity, Database Systems, Programming Languages
- Honors: Upsilon Pi Epsilon (CS Honor Society @ UCLA), American Invitational Math Exam (AIME) Qualifier

EXPERIENCE

Software Engineering Intern | *UCLA Tech*

April 2020 - September 2020

ccle.ucla.edu | github.com/ucla/lti-library-resources

Developed new full-stack LTI web applications to integrate into CCLE, the shared collaboration and learning environment used by over 50,000 UCLA students/faculty.

- Built user-friendly UI components and RESTful APIs using Node.js, React.js, Express.js, and MongoDB.
- Utilized UCLA's Registrar API to guery for course and user details and update the local database.
- Unit-tested for airtight functionality with Jest/Enzyme.

Fulfilled feature requests and patched bugs in CCLE's existing application, built with PHP and mySQL.

Employed Agile/Scrum methodologies.

Web Developer | ACM Teach LA @ UCLA

September 2019 - Present

editor.uclaacm.com | uclaacm.github.io/getting-mean-about-error

Develop web education tools to make computer science more accessible at local Title I schools in Los Angeles.

Contribute features to Teach LA's online code editor (React.js, Express.js).

Create interactive **machine learning** lessons (topics include Linear/Logistic Regression, Mean Squared Error). Implement animations, graphing, etc. with **Javascript** libraries such as FunctionPlot (d3.js), math.js, and anime.js.

Beautify interface with frameworks like Bulma and Material UI.

PROJECTS

Interactive Shell | C

github.com/kilometerskang/operating-systems

Wrote a script in **C** to send client's keyboard commands to a server and return the output from a specified shell program (i.e. Bash). Experimented with polled I/O, forking, data compression, and inter-process communication.

Movie Database | PHP, MySQL

kilometerskang.github.io/movie-database

Developed a searchable interface to query and display movie and actor/actress information and leave reviews.

Record Player Simulator | Javascript, WebGL

github.com/kilometerskang/record-player-simulator

Implemented animations, collision logic, gravity, sound effects, and more with a WebGL framework.

Personal Portfolio | React.js, Node.js

kilometerskang.github.io/me

Created a **React** app to showcase projects and involvements and styled using **SASS**.

SKILLS

- Languages: Python, C++, C, Javascript, Typescript, Java, PHP, SQL, OCaml, Bash, HTML/CSS/SASS.
- Libraries/Frameworks: React.js, Node.js, MySQL, MongoDB, Express.js, Angular, Jest, Enzyme, Webpack.
- Tools/Workflows: Git, Docker, Scrum/Agile methodologies, Jira, Trello, Linux/Unix.
- Interests: jazz, music production, accessible education, web development.