Miles Kang

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UNIVERSITY OF CALIFORNIA, LOS ANGELES
Computer Science, B.S.

Class of 2022
GPA: 3.81

Coursework:
- ❖ Data Structures & Algorithms
- ❖ Computer Organization
- ❖ Discrete Structures
- ❖ Operating Systems
- ❖ Computer Graphics
- ❖ Software Construction Lab
- ❖ Abstract Linear Algebra
- ❖ Applied Numerical Methods
- ❖ Algorithms/Complexity (IP)

Skills and Platforms:
- ❖ **Languages:** Python, C++, C, Javascript, PHP, HTML/CSS/SASS.
- ❖ **Libraries/Frameworks**: React, Node.js, Express.js, MongoDB, MySQL, Jest, Enzyme, Webpack.
  - ➢ Working knowledge of Angular, Vue, Django, Flask.
- ❖ **Tools/Workflows**: Git, Docker, Scrum/Agile, Jira, Trello, Linux/Unix.

EXPERIENCE

Software Engineering Intern | *CCLE*
April 2020 - September 2020

Develop full-stack LTI tools to integrate into Moodle/Canvas (used by over 35,000 UCLA students/faculty) using **Node, React, Express, and MongoDB**.

- ❖ Build a user-friendly frontend with React and Instructure UI (frontend framework).
- ❖ Write RESTful APIs to send/retrieve user and course data between client and MongoDB.
- ❖ Write **Jest/Enzyme** unit tests for airtight functionality.

Contribute frontend and backend features for UCLA's Moodle server. (**PHP, Javascript, mySQL**)

Use **Git** and **Jira** for collaboration and code review, **Docker** for local environment. Employ **Agile/Scrum** methodologies.

Web Developer | *ACM Teach LA @ UCLA*
Sept. 2019 - Present

Develop web education tools for students at local Title I schools.

Contribute features to our online code editor (**React, Express, Firebase**): *editor.uclaacm.com*

Create interactive **machine learning** web lessons (topics include Linear/Logistic Regression and Mean Squared Error).

- ❖ Incorporate **Javascript** libraries such as FunctionPlot (d3.js), math.js, and anime.js.
- ❖ Beautify frontend with Bulma CSS framework.

PROJECTS

Interactive Shell   *C*

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.

Record Player Simulator   *JS, WebGL*

Designed an in-browser 3-D interactive record player / shooting game with **Javascript**.

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

Personal Portfolio   *React, Node*

Created a **React** app to showcase projects and involvements: *kilometerskang.github.io/me*

Styled using **SASS**.

HONORS

Upsilon Pi Epsilon | *CS Honor Society*

Inducted Fall 2019.

AIME | *American Inv. Math Exam*

Top 2.5% scorer on AMC 10 (2017), top 5% on AMC 12 (2018).