

Ku Kim

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Education

University of California, Irvine

Master of Software Engineering

Cumulative GPA: -/4.00

Sept 2022 – Dec 2023 (Expected)

University of California, Berkeley

Bachelor of Arts: Molecular and Cell Biology

Cumulative GPA: 3.62/4.00

Aug 2018 – Dec 2019

University of California, San Diego

Bachelor of Science: General Biology

Cumulative GPA: 3.87/4.00

Sept 2016 – July 2018(UC→UC Transfer)

Professional Experience

Zymo Research Corp | Research Associate

Feb 2020 – Nov 2020

- Research and Development of Zymo's urine nuclease stabilizing reagent
 - Creating data sheets, protocols, and conducting experiments for clinical applications
- Extraction of nucleic acids and quantification of human saliva and urine samples

Promis Diagnostics | Research Associate

Dec 2020 – April 2022

- Development of colorectal cancer, UTI, and bladder cancer assays
 - Experimental design and planning, data analysis, and documentation to satisfy CLIA and CAP requirements
- Engineering automated methods for accessioning, liquid handling, and extraction

Skills

Laboratory

- Kingfisher Flex (Thermofisher BindIt Software) - developed protocols for automated urine extraction in 24 and 96 well formats
- Sample processing(Nucleic Acid extraction) from stool, urine, blood, saliva, and swab samples
- Manual column and KingFisher extraction methods
- DNA quantification via PCR, nanodrop, and Qubit
- Epigenetics based protocols, namely bisulfite conversion and Linear targeted enrichment-qualitative methylation specific real time PCR (LTE-qMSP)

Programming

- **(C#)** Hamilton Starlet - fully automated PCR plating for a UTI assay consisting of a 16 pathogen panel (10 and 5ul rxn vol) on 384-well plates
- Microsoft Power-automate - streamlined accessioning of patient information and test-result delivery through Twilio and Bitly
- Created canvas apps for COVID sample collection sites which collects patient data into the lab database and notifies patients of their sample status
- **(Javascript)** Created Satirical questionnaire that counts the total number of checked boxes, and uses sessionStorage to give a total tally with a comment on a separate page
- **(HTML and CSS/Bootstrap)** Creating web page for Zymo's PrecisionBiome service
- **(Java)** Majority of coursework in the Master's Program consists of Java Programming