Gabriel M. Mukobi

Web: gabrielmukobi.com | Email: gmukobi@stanford.edu | Mobile: 360.525.7299 | GitHub: mukobi | Unabridged CV: goo.gl/UaaKMQ

Education:

Stanford University - B.S. 2022 Computer Science, Artificial Intelligence Track - Cumulative GPA: 4.018

Coursework: AI, Graphics, HCI, Probability, Systems, Logic, Android, Algorithms, Linear Algebra, Multivariable Calculus

Google CSSI-Coursera Program Participant - 2018

Online program run by the Google Student Development team. Online class in Java, interview prep, and collaboration with other CS students.

Camas High School - Diploma 2018, Math, Science, and Technology Magnet Program - Cumulative GPA: 4.0

Experience:

Google Engineering Practicum Intern, Google Cloud Product - June 2019-Sept 2019 - github.com/knative-portability

Developed 2 full-stack open-source applications (Large Events, Kubercade) as proof of portability for Knative, an open-source platform for serverless containerized workloads. Learned software engineering skills and tested Google's Knative implementation, Cloud Run. Skills: Python, Flask, MongoDB, Travis-CI, unittest, Coveralls, OAuth 2.0, Node.js, Express.js, TypeScript, PostgreSQL, Circle-CI, Mocha.js, Chai.js, Codecov.

Took internal classes in machine learning with TensorFlow and programming in Golang.

Freelance Web and Software Developer, Sticks and Stones Software - Sept 2017-Present - software.gabrielmukobi.com

Performed freelance web, mobile, and desktop development through my company, Sticks and Stones Software. Skills: software engineering, product delivery, Node.js, React, Vue.js, PHP, HTML5, CSS, JavaScript, web APIs, SQL and NoSQL database management, VCS.

Software Engineering Intern, Portland State University, Ralf Widenhorn Physics Lab - June 2017-Aug 2018 - github.com/mukobi/pozyx-clone

Developed software for a high accuracy positioning device, Pozyx, and implemented it as a tool for physics education. Skills: Python, Java, JavaFX.

Skills and Activities:

Programming - software.gabrielmukobi.com

Python - very experienced - TensorFlow, Keras, Flask, back-end web development, automation and scripting, general programming.

JavaScript - very experienced - Node.js, TypeScript, React, Vue.js, jQuery, ES6, front-end web development, general programming.

C++/C - very experienced - algorithm design and implementation, DirectX, x86, assembly language, general programming.

C# - moderately experienced - Unity game engine, .NET Framework, general programming.

Java - moderately experienced - JavaFX GUI design and construction, Android development, Kotlin, general programming.

Machine learning - somewhat experienced - deep neural networks, regression, classification, clustering, SVMs, TensorFlow, Keras.

Virtual reality - somewhat experienced - Unity game engine, SteamVR, Virtual Reality ToolKit, Valve Index, HTC Vive, Windows MR.

Web development - very experienced - full-stack, HTML5, API design, MongoDB, SQL, responsive design, Webpack, serverless, cloud.

Software engineering - very experienced - code review, documentation, testing, coverage, debugging, CI/CD, VCS, GitHub, GitLab, open-source.

Music and Clubs - music.gabrielmukobi.com

Anywhere But Here - solo album released June 2018. Written, recorded, mixed, mastered alone. Free download available.

Music groups - Stanford Jazz Orchestra and Jazz Combos program 2018-present. Camas HS bands 2014-18 and Band President 2017-18.

Instruments - guitar, french horn, trumpet, keyboards, electric bass.

Graphics/VR - Stanford SIGGRAPH Events Coordinator 2019-20, Virtual Human Interaction Lab VRITS Programmer 2019-20, Rabbit Hole VR 2019-20.

AI - Stanford Artificial Intelligence Group member 2018-present.

Research:

Implementing a High Precision Ultra-Wideband Positioning System for Kinematic Education - 2017-18

Symbiosis Between Various Arbuscular Mycorrhizal Fungi and Lactuca sativa on Carbon Dioxide Uptake and Sequestration - 2015-16

Implementing Heat Conductive Riffles to Lessen Small Scale Thermal Pollution in Developing Nations - 2015-16

The Measured Efficacy of Water Purification by a Graphene Sand Composite Filter - 2014-15

Service Experience:

Kasese Wildlife Conservation Awareness Organization (KWCAO) - Sept 2016-Present - www.kasesewildlife.org

Volunteers web development skills to update and maintain the Kasese Wildlife Conservation Awareness Organization (KWCAO) website.

Selected Awards:

Intel Excellence in Computer Science Award - SW Washington Science and Engineering Fair 2018

MST Magnet Best of Senior Class Award - Camas High School MST Magnet Spring Research Symposium 2018

1st Place, Embedded Systems - Washington State Science and Engineering Fair 2018

National Merit Scholarship Program finalist and scholarship winner - 2018

Mu Alpha Theta National Mathematics Honor Society Award - SW Washington Science and Engineering Fair 2018

Wolfram Mathematica Computational Knowledge Award - Washington State Science and Engineering Fair 2015