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, Data Structures, Algorithms, Systems, Logic, Android, Linear Algebra, Multivariable Calculus

Google CSSI-Coursera Program Participant – 2018
> An 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:

VRITS Programmer, Virtual Human Interaction Lab – Sept 2019-June 2020 – vhil.stanford.edu
> Created virtual worlds as a Virtual Reality Intensive Training Seminar (VRITS) programmer at Stanford University's Virtual Human Interaction Lab (VHIL). Built experiences that are actively used in research, studies, demos, and tours at VHIL to understand the dynamics and implications of interactions among people in immersive virtual reality simulations. Skills: Unity, Blender, virtual reality, OpenVR, SteamVR, C#.

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
> **Game Development** - moderately experienced - Unity game engine, Blender, virtual reality, OpenVR, SteamVR, Virtual Reality ToolKit
> **Machine learning** - somewhat experienced - deep neural networks, regression, classification, clustering, support vector machines, Markov decision processes, TensorFlow, Keras.
> **Web development** - very experienced - full-stack development, HTML5, RESTful API design, MongoDB, SQL databases, responsive design, Webpack, Babel, serverless, Knative, Docker, Kubernetes, Google Cloud Product.
> **Software engineering** - very experienced - code review, documentation, unit testing, integration testing, test coverage, bug reporting, CI/CD, debugging, IDEs, command line, Unix.
> **Version control systems** - very experienced - git, GitHub, GitLab, open-source contribution.

Languages
> **Python** - very experienced - TensorFlow, Keras, Flask, back-end development, automation and scripting, RESTful API design, general programming.
> **JavaScript** - very experienced - Node.js, TypeScript, React, Vue.js, jQuery, ES6, front-end web development, general programming.
> **C++** - very experienced - algorithm design and implementation, DirectX game/graphics programming, general programming.
> **C#** - moderately experienced - Unity game engine, .NET Framework, general programming.
> **C** - moderately experienced - low-level interaction, x86, assembly language, general programming.
> **Java** - moderately experienced - JavaFX GUI design and construction, Android development, general programming.
> **Go** - somewhat experienced - back-end development, general programming
> **Kotlin** - somewhat experienced - Android development.
> **PHP** - somewhat experienced - back-end web development, general programming.

Music – 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.

Clubs
> **Graphics and VR** – Stanford XR Social Chair 2019-present, member and developer 2018-present; Stanford SIGGRAPH Events Coordinator 2019-2020; Virtual Human Interaction Lab Virtual Reality Intensive Training Seminar Programmer 2019-2020.
> **Music** – Plays in the Stanford Jazz Orchestra and the Stanford Jazz Combos program 2018-present. Played in the Camas High School Marching Band, Symphonic Band, Brass Choir, and Wind Ensemble 2014-2018 and the Jazz One Band 2016-2018; elected Band President 2017-2018.
> **AI** - Stanford Artificial Intelligence Group member 2018-present.
> **Service** - Was an active member of the Camas National Honor Society 2016-2018; elected NHS historian 2017-2018.