# **Emmanuel Gallegos**

parasollab.web.illinois.edu/people/eg11 \$\dinkedin.com/in/emmanuel-gallegos \$\dinkedinlooning eq11@illinois.edu

## Education

University of Illinois at Urbana-Champaign

Master of Science in Computer Science, GPA: 3.95

California State University: East Bay

Bachelor of Science in Computer Science, GPA: 4.0

Chabot College

Associate of Science in Mathematics, Associate of Science in Computer Science, GPA: 3.64

Expected May 2023

Champaign, IL

Hayward, CA

Hayward, CA

Hayward, CA

## Professional Experience

Research Assistant August 2021 - Present

Parasol Lab @ University of Illinois at Urbana-Champaign

Champaign, IL

- Augmented open-source C++ motion planning library with support for advanced parallel methods
- Developed an open-source tool based on Mozilla ChaosMode to automatically detect flaky tests in large-scale C++ applications

## Lead Software Engineer

June 2020 - August 2021

T'ena Health Technologies

San Francisco, CA

- Single-handedly developed a functional suite of Android tele-health applications with Google Firebase as a prototype to secure funding from the Covid-19 Africa Rapid Grant Fund and other investors
- With a larger team, developed two HIPAA-compliant tele-health Android applications using Amazon Web Services, which are now available on the Google Play store

Research Assistant May 2020 – January 2021

iLab @ California State University: East Bay

Hayward, CA

- Trained several deep learning models using TensorFlow to detect heads in low-resolution infrared images for realtime fever detection from a mobile platform
- Consolidated realtime data to a custom Google Maps interface to allow users to increase situation awareness with respect to Covid-19
- This research led to two publications as a named author in the 2021 SPIE Signal Processing, Sensor/Information Fusion, and Target Recognition Conference

#### Specialized Skills

Programming Languages: C++, Java, Python, JavaScript, BASH, HTML/CSS

**Specializations**: Android, Computer Vision, Parallel Programming, Task and Motion Planning **Tools/Libraries/APIs**: Git/BitBucket, Jira, Google Firebase, AWS, TensorFlow, C++ STL, MPI, OpenMP, OpenCV, Docker, VSCode with SSH, Linux OS, SQL, React, Jupyter Notebook, ROS

Soft Skills: Public Speaking, Writing, Diversity Outreach, Leadership, Organization

#### Other Experiences

Black, Indigenous, and Latinx in Tech (B[U]ILT) Club Treasurer

University of Illinois at Urbana-Champaign

**Broadening Participation in Computing Fellow** 

University of Illinois at Urbana-Champaign

**Graduate College Fellow** 

University of Illinois at Urbana-Champaign

August 2022 - Present

Champaign, IL

August 2022 - Present

Champaign, IL

August 2021 – May 2022

Champaign, IL