

KEI PALABASAN

Digital Design Engineer

ABOUT ME

Digital designer in Verilog with training in UVM verification framework. Studied MEMS design and fabrication in undergrad.

Hobbyist hardware and software developer dabbling in web dev, cloud, IoT and ML/AI applications in robotics. Daily driver Linux user with experience debugging issues in systemd.

EXPERIENCE

May 2022 **Hardware Engineer**
Smartfox Data Solutions, Inc.; Full time; Remote
- Digital design and verification in SystemVerilog and UVM.
- Assessed machine learning performance of hardware designs.
- Works with computer graphics (Vulkan, GLSL) and drivers (Windows, Linux).

ORGANIZATIONS

Oct 2021 **Chief Executive Officer**
UP Competitive Robotics Club
- Managed organization's transition to face-to-face activities
Oct 2022 - Oversaw 2022 UFM onsite booth
- Oversaw org's first F2F robotics workshop
- Handled elections and yearly constitutional amendments

PUBLICATIONS

2023 **Hardware-optimized machine learning model comparison for human activity recognition using the HARTH and HAR70+ datasets**
Palabasan, K.R., Rajagopalan, R.S., Manzano, J.M., Rosales, M.D., De Leon, M.T., Hizon, J.R.E.
Submitted as Undergraduate Project. Presented at ISOC 2023. Furiosa AI Award.
doi:10.1109/isoc59558.2023.10396338

2018 **Effectiveness of Anti-Overloading System for Automotive Transport (AOSAT) in Selected Truck Drivers in Binangonan Rizal**
Otiong, K.S.J., Palabasan, K.R., Ramirez, J.C.B.
Submitted as Senior High School Thesis, Submitted for WICO 2018

LANGUAGES

English - native
Filipino - proficient
Japanese - proficient

HOBBIES

Music, Singing, Guitar, Mechanical Keyboards, Anime and Manga, Cosplay, Programming, Amateur Radio, Robotics

@ kei@silikeite.me
silikeite.me
Diliman, Quezon City

silikeite
silikeite

SKILLS

Languages: C/C++, SystemVerilog/UVM, GLSL, Python, LaTeX

OS/Applications: Linux (systemd, deb/rpm/arch, x86_64/ARM), Tensorflow, Vulkan, LTSpice, JAMStack

Miscellaneous: Hardware/software troubleshooting and debugging, Linux system configuration and maintenance, problem-solving, team communication

EDUCATION

Aug 2019 **BS Electronics Engineering**
University of the Philippines Diliman - Quezon City, NCR
- Graduated *summa cum laude* (1.12 GWA, equiv. 3.8 GPA)
Aug 2023 Affiliated with UP Microlab for capstone project.

ACHIEVEMENTS

2018 **World Invention Creativity Olympiad**
Seoul, South Korea
Gold Medal

2017 **World Invention Creativity Contest**
Seoul, South Korea
Gold Medal, MyRIS Special Award

2016 **International Olympiad in Informatics**
Kazan, Russia
Contestant

2015 **International Olympiad in Informatics**
Almaty, Kazakhstan
Contestant