KELVIN GATURUHU CHUI

✉ chuikelvin2@gmail.com
🐙 https://github.com/chuikelvin
🌐 https://kelvinchui.com
📞 +254-703719594

ABOUT ME

I am a mechanical engineering technologist and a computer programmer well-versed in web and mobile technologies, IoT, logic-based programming, mechatronics, and robotics.
My expertise includes creative thinking, problem-solving, logical thinking, and system design.
I am eager to contribute to team success through hard work, attention to detail, and good communication skills over and above my training and skills.

WORK EXPERIENCE

AO Technology Group (Pty) Ltd (Nairobi, Kenya)   October 2023 - Present

Full-stack software development intern

- I worked with a small team of passionate software developers and primarily developed and maintained features for existing Fintech projects built using Laravel.
- I helped contribute to the design and development of a Hospital Management System.
- I was part of the main team that through intense collaboration managed to deliver a Hotel Management System.
- I played a pivotal role in spearheading the integration of React.js for the Point of Sale (POS) module within the Hotel Management System to enhance user interfaces and improve overall user experience.

Kitengela International Schools (Syokimau Campus)   May 2023 - October 2023

Coding and robotics facilitator

- As a part of KEMSAP ALOHA AFRICA's coding team, my role was to introduce children into the world of computer programming and robotics.
- This was done to give them a competitive edge in the modern technological world in which we live in.
- We introduced them to scratch programming to give them an understanding of how to make a computer perform simple tasks in the order given and in turn, this helps them develop a logical thinking approach to problem-solving.
- Later on, they would be introduced to concepts of Web Development to equip them with skills to build websites from which we moved on to more complex languages primarily Python.

WORK EXPERIENCE

Inceptor Institute of Technology   August 2022 - February 2023
Software Development Instructor

- My role is to teach, instruct and guide students of different ages and background on the steps they need to take to become competent software developers.
- My first task was to come up with a curriculum and work plan on how to go about teaching the various languages to the students.
- Languages taught include HTML, CSS, Bootstrap, php, MySQL, JavaScript, Python and Django and Flutter under different modules.
- Modules taught are:-
  -Web design (HTML, CSS, BOOTSTRAP)
  -Web and Software (front-end through web design and backend through Php and mysql)
  -Software and Mobile App Development Intermediate (Web and Software plus Dart with Flutter for mobile)
  -Software and Mobile App Development Advanced (Web and Software, Dart with Flutter and either Javascript or Python)

Nimden Enterprises   October 2021 - January 2022
Industrial Attachment

- I had the opportunity to join Nimden Enterprises for my three-month industrial attachment.
- Nimden Enterprises is a manufacturing venture that deals with sheet metal forming processes.
- I was tasked as a machine operator trainee and had the opportunity to learn the operation and maintenance of the various machines.
- These machines include a sheet metal shearing cutter, a hydraulic press brake machine for bending, a roller machine, an expanded wire-making machine, a punching machine, and a roller shutter making machine.

EDUCATION, TRAINING AND CERTIFICATIONS

Kiambu high school 2015	Kenya certificate of Secondary Education (K.C.S.E) B+
EMobilis Mobile Technology Training Institute 2016	Certificate in Mobile Software Development and Entrepreneurship (MIT)
Gearbox kenya 2019 - 2021	Certificate in Workshop Technologies, Digital Fabrication and Human Centered Design
Power Learn project(PLP) 2022	Software Development Program
The Technical University of Kenya 2016 - 2022	Bachelor of Technology Mechanical Engineering Technology Second Class Honours (Upper Division)

TECHNOLOGIES AND PROGRAMMING LANGUAGES

GIT	HTML	CSS	C and C++	Python	django	MySQL
JavaScript	Node Js	PHP	React	Three Js	Mongo DB	FLUTTER
Raspberry Pi	Arduino	PlatformIO	solidworks	Fusion 360	EasyEDA	Firebase

PERSONAL PROJECTS AND ACCOMPLISHMENTS

Made a two way electromechanical switch for physical and wifi switching

I wired a relay controlled by an Espressif microcontroller to a physical switch. The wiring was done in a two-way configuration enabling switching by either the relay or physical light switch

Made an automated CNC embroidery module for our final year project

Through intensive team effort by my project partner and I, we were able to design and make an embroidery module that can be attached to old sewing machines to enable embroidery operations to be performed when needed. The module is detachable to allow the sewing machine to perform normal straight stitch sewing operations.

Made a robotic gripper that mimics a hand

Using a camera feed, object recognition, and object tracking machine learning model, I was able to track my hand and get the relative position data of my index and thumb fingers and use the data to control the angle of two servo motors and hence simulate a robotic gripper.

Built a learning management system with no backend using session storage

This was following one of the Web Development assignments under the Power Learn Project. The task was to design the front end of a learning management system where a student or instructor would log in and view their progress.I wrote a code that would generate dummy data and store it temporarily using session storage until the user logged out.

Built an Ecommerce Web Application using Python django

For my final project under the Power Learn Project I opted to create a full stack Ecommerce website using django. The website features add to cart functionality, register and log in users with their cart data stored in a database, order placement and payment using Mpesa via daraja api.

Built a React Native App to communicate with programmed espressif devices

Tired of viewing data logs of my Espressif devices on the terminal, I developed a simple app that would connect to any device on the same network. I used UDP broadcast to send a message to all devices on the network and only specific devices would respond, this would provide the devices IP address to initiate a websocket connection and get sensor data. This project is still a work in progress now being developed with Flutter.

PERSONAL PROJECTS AND ACCOMPLISHMENTS

Built BuzzNote a note taking application using Flutter (Dart)

As part of the learning and practicing process, I developed a simple note-taking app that allows users to jot down quick notes. The design is inspired by Google Keep and all data is currently being stored on the user's device. This is key for privacy though I am looking to enable server storage using Firebase to allow for continuity between devices and platforms as well.

Built an Ecommerce platform using React and Firebase

I developed a working ecommerce platform that allows users to view products, add them to cart and place orders. This works hand in hand with an administrator dashboard that allows approved personel to add and manage products, view and process the orders for a fully functional ecommerce platform powered by React and running on Firebase

Working on Empathia a platform for providing accessible mental health care

I am spearheading the conceptualization, design, and development of Empathia, an innovative platform aimed at seamlessly connecting therapists with clients seeking mental wellness services.

Clients and therapists can communicate messaging service. Therapists can schedule meetings with Google calender on the platfom, they can set and give tasks to clients as well as manage their clients.

Working on WabaPay a Water Refill Vendor and Client Connection Platform

I am also working on the development of Wabapay, an innovative platform designed to bridge the gap between water refill vendors and clients, streamlining the process of ordering and delivering water.