Michael Kohlberg

MichaelKohlberg.com	Full Stack Software Engineer	github.com/mgkdn9
mkohlberg95@gmail.com	Electrical and Computer Engineer in Training	(314) 698-6241

Professional Summary

I am a full stack software engineer with a background in mechanical and electrical engineering and a passion for getting stuff done.

Education

University of Missouri Columbia   BS Mechanical Engineering,   Computer Science Minor   3.57 GPA   2017

General Assembly Software Engineering Immersive   13-week Coding Bootcamp   2022

Personal Coding Projects

PokéClone   Tech: HTML, CSS, Javascript, PokéAPI, Canvas
- Pokémon based RPG where a user battles randomly encountered or searchable real Pokémon fetched from API

OoIHaveThat   Tech: Postgres, Express, Node, Bootstrap, EJS, MapBox API, Data seeding, Sequelize
- Peer-to-peer tool sharing platform allowing DIYers to request tools from other nearby users

Reart   Tech: React, MongoDB, Express, Node, Mongoose, RestfulAPI, Stripe, Postman
- Subscription art rental platform where users select keyword preference tags which allows our automated warehouse to personalize suggestions for quarterly art rentals/purchases

AlgoViews   Tech: React, MongoDB, Express, Node, RestfulAPI, Async Javascript
- Algorithm visualization tool aimed at students which sorts an array on-screen according to various algorithms

KCMOMovers.com   Tech: HTML, CSS, Javascript, PHP, jQuery, Flexbox, Grid
- Personal company website for marketing purposes as well as coding practice

Other Computer Proficiencies

AngularJS, Python, UX, PLCs (TwinCAT), Java, Git (Github, Azure), C, Matlab, Simulink, NoSQL, SQL, MySql, Django, TypeScript, Microsoft Office (Excel,Access), Windows, MacOS, Remote Desktop, Agile, Scrum, Authorization, Authentication, WordPress, JSX, JSON, XML, CAN Bus, RV-C, PCAN, Ionic, Capacitor, Ignition, AutoCAD, SolidWorks, Allen Bradley, GIS, Synergy, LabView.

Work Experience

Firefly Integrations   Mobile Application Developer   2022 - Present
- Developer for Vegatouch (VT) Mira and VT Eclipse mobile applications which allow users to control and monitor the appliances in their recreational vehicle such as lights, thermostat, water tanks, generator, inverter, solar, etc.
- Configured and deployed JSON files on AWS to be fetched by the VT mobile apps in order to have the end user's experience customized for their particular RV according to strict manufacturer requirements.
- Integrated mobile app with the Multiplex control system which was affixed in each RV.
- Controlled third party appliances using RV-C protocol on CAN bus.
- Cross-platform development using Ionic Capacitor with AngularJS.

New Frontier Technologies   Traveling Controls Engineer   2020 - 2021
- Installed electrical control panels, wireless temperature sensors, modem and router to allow power savings on freezers, lights and other appliances at gas stations and fast food restaurants.

Kays Engineering	Controls Software Engineer	2018 - 2020

- Developed object oriented PLC program for industrial drilling and boring machinery using TwinCAT software.
- Worked directly with all levels from OEMs to day-to-day operators to produce user-friendly HMI.
- Incorporated both CNC G-code functionality along with simpler, conversational programming for the HMI.
- Read and edited electrical prints to understand how a machine would work.
- Integrated and parameterized VFD and servo drives as well as other peripheral hardware.
- Utilized a variety of networking and source control tools to troubleshoot with customers.

Kays Engineering	Controls Engineering Intern	Summer 2017

- Developed communications for new Smart Panel PC to control the original PLC in older machines.

Alliant Energy	Natural Gas Engineering Intern	Summer 2016

- Modeled pressure and flow in natural gas pipelines using Excel and GIS software.

Associated Electric Coop Inc.	Reliability Engineering Intern	Summer 2015

- Assisted in revamping coal power plant preventative maintenance operations.

KCMO Movers	Owner / Operator	2014 - 2022

- Managed a small moving business including all marketing, billing, customer relations and employee management.

Other Skills and Interests

Long term software business planning, Asset management, Electrical troubleshooting, RV van conversions, Solar/Battery/Generator configurations, Homeowner DIY, Mobility, Communication, Work ethic, Integrity.

Honors and Achievements

- Passed Fundamentals of Engineering Exam for Electrical & Computer Engineering (without EE degree)
- Fabricated thermoelectric generator allowing a campfire to charge a cellphone battery (Senior Capstone)
- Web Manager for Mizzou Electric Car Team (completed electric drivetrain conversion of Chevy truck)
- Web Manager for Mizzou Robotics Club (fabricated battle bot and competed against other universities)
- Developed CounterMeme (website similar to reddit where memes are created and battled head-to-head)
- HackMizzou 2016 contestant (Led a team to develop our idea of a grocery finder app for Walmart)
- High honor roll for 9 straight semesters at University of Missouri College of Engineering