# Abdulrazzaq Alhendi

## **Education**

CODED (Kuwait) May 2021 - August 2021

Full-Stack Web Development

• Stack: HTML5, CSS3, Bootstrap, React, ExpressJS, PostgreSQL, Sequelize, React Native Iowa State University (Ames, IA)

Jan 2016 - Dec 2019

B.S. in Chemical Engineering

• Relevant Courses: Numerical Methods, Multivariate Calculus, Differential Equations, Algorithm Design and Analysis, Survey of Remote Sensing Technologies

# **Experience**

#### Senior Research Technician - Dasman Diabetes Institute (Kuwait)

July 2020 - April 2023

- Modeling patient time-series data from Electronic Health Record systems through statistical methods. Automating large, repeatable data analysis methodologies with documentation.
- · Authoring research papers and manuscripts.

#### Undergraduate Research Assistant (Dr. Qian Wang) - Iowa State University (Ames, IA)

March 2018 - Dec 2019

- Initialized development of a **neuron tracing application** utilizing computer vision and machine learning algorithms to aid advancements in neuron morphology research.
- Contrasted and tested most current automated and semi-automated neuron tracing packages while collaborating with authors on package improvements.

#### Undergraduate Research Assistant (Dr. Auriel Willette ) - Iowa State University (Ames, IA)

Jan 2018 - Dec 2019

- Developed a program to interpret and compare patient response to correct response for a cognitive test in patients following an emotion task recorded using EEG automating a time consuming evaluation process.
- Constructed a batch program to process MRI brain scans of multiple subjects as well as perform statistical analysis calculations which reduced computational and labor costs.

Undergraduate Research Assistant (Dr. Derrick Rollins ) - Iowa State University (Ames, IA)

Aug 2016 - Dec 2017

- Automated a feedforward predictive model control (FFPMC) system using VBA with desired input step size and desired steps ahead allowing for variable temporal resolution.
- Analyzed and compared research methods of papers following detailed procedures for efficiency of methods used pertaining to relevant predictive model control systems.

# **Recent Projects**

Jackaroo-py September 2022

github.com/aalhendi/jackaroo-py

- · A pure-python simulation engine for the board game Jackaroo. Used in artificial agent training and statistical analysis.
- **Stack**: Python, Github Actions (CI/CD)

Bunyan September 2021

github.com/aalhendi/Bunyan

- Developed a **Mobile Application and Dashboard** to connect land owners looking to build their homes with contracting companies and their workers. Companies set tasks for workers which can be tracked on both the client and company side.
- · Stack: React, React Native, Node, PostgreSQL

#### **National Bank of Kuwait Hackathon 2021**

July 2021

Kuwait Times News Article

- Developed a digital banking mobile application targeting children and families to foster healthy personal spending habits and encourage savings. Deadline was 48 hours from design to demonstration. First place.
- Stack: React Native, Node, PostgreSQL

### **Licenses & Certifications**

Object-Oriented Data Structures in C++

May 2021

coursera.org/account/accomplishments/certificate/C2BQW66FSSP4

# **Technical Skills (Proficient, Familiar)**

Languages Typescipt, Python, C/C++, Rust, Dart, MATLAB, VBA

Data AnalysisNumPy, Pandas, RSoftware EngineeringGit, UNIX Shell, Docker

Frontend Development Next.js, TailwindCSS, React Native Flutter

Backend Web Development NodeJS, Prisma, Django, Laravel, Rust, GraphQL, RESTful API

Visualization Matplotlib, Seaborn

Other Linux