

Fadil Eledath

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Education

Rice University, Houston TX

Aug 2019 - May 2023

- B.S. in Electrical Engineering, B.A. Computer Science
- Relevant Courses: Physics (Mechanics, E&M), Data Structures and Algorithms, Object Oriented Programming
- GPA: 3.70/4.0

Technical Skills

- Languages: Python, PHP, SQL, HTML, CSS, JavaScript, Java
 - Software/Tools: Git, Fusion 360, Adobe XD, WordPress, Pandas, Scikit-learn, Seaborn, Jupyter, Arduino, Raspberry Pi
 - Operating Systems: Windows 10, MacOS, Ubuntu, Raspbian
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Related Work Experience

Software Engineer Intern, SA Home Loans

May 2020 – July 2020

- Analyzed real-world data from 20,000+ loan applicants of government workers in South Africa.
- Performed EDA with data visualizations and constructed pipeline for data cleaning and model training, testing and comparison through performance metrics.
- Developed and trained a machine learning model to predict likelihood of payment method opt-out using ensemble classification models such as random forest, stacking and XGBoost.

Software and Hardware Engineer (Freelance) Inner Space

May 2020 – July 2020

- Devised Work-From-Home IOT desk solution with portable 4G module for interior design company.
- Built data server and app backend on AWS with PHP, MySQL to log and return employee information.
- Created interface between server API and Python data analysis script with result caching to speed up requests.
- Designed corporate dashboard to track employees' location and productivity metrics.
- Developed companion mobile app using React Native to control desk peripherals.
- Connected peripherals like off-the-shelf LED lights and sit/stand desk to Arduino and Raspberry Pi to allow remote control in prototype.
- Delegated circuit design with specifications for light control system.

Co-Founder and Tech Lead, DelegatePal

Feb 2016 – July 2018

- Surveyed common pain points among high school Model UN Delegates.
- Designed UI/UX and wrote code for website (1,000+ monthly visits) and mobile app (10,000+ installs)
- Developed first iteration with LAMP backend and AngularJS frontend.
- Engineered current version to be serverless with no hosting costs using Google Drive JS API for user data management.
- Wrote JS web-scraper to pull and organize data from multiple UN General Assembly committees on passed resolutions.

Project Work

Rice Escape Club 2019/2020 Room

Sep 2019 – Feb 2020

- Devised challenge ideas for players to experience.
- Constructed PVC pipes to emit particular standing-wave frequencies and a panel interface using Arduino for puzzle.
- Designed and built final puzzle with LEDs and 4-digit input PIN for room.
- Created Raspberry Pi based control system for game hosts to interact with and monitor participants.

Trashberry

April 2016 - present

- Conceptualized a robotic reverse-vending machine to incentivize recycling behavior.
- Fabricated a conceptual test unit with working parts to demonstrate feasibility.
- Programmed the functionality on both the frontend and backend for model.
- Upgrading form using design thinking process to implement practically using grant.

Awards and Honors

- Rice Lilie New Entrepreneurs Grant (\$2500)
- Emirates Energy Award - Special Recognition (\$8200)
- Youngest Finalist for UAE AI & Robotics for Good Award
- Selected for UAE National Innovation Exhibition

HackRice X

Sep 2019

- Conceptualized a Chrome extension to synchronize timers across multiple users' devices in "rooms" for study groups physically spread out.
- Created a backend to accept requests through PHP backend and organized data in MySQL DB.
- Developed Chrome extension frontend in JS.

Rice Datathon 2019

Jan 2019

- Co-wrote Python script to create a logistic regression model of divorce prediction based on questionnaire data.
- Designed online interactive quiz to apply model to new sets of responses to questionnaire.