Andrew Clark

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Full Stack Software Engineer in Olathe, KS

A highly motivated individual with analytical skills and B.S. in Computer Engineering. In constant pursuit of finding the best way that I can provide value. Interested in future opportunities where my technical skills and experience in software application development, using modern tools, will be utilized by the company

WORK EXPERIENCE

Full Stack Software Engineer — ZOO Fans (acquired by Rite-Hite), Olathe, KS

Feb 2020 – Present

- Created solo project which allows users to configure sales orders, program controllers, and archive configurations for future reference (details below in project experience section)
- Contributed to existing Carel c.suite project which compiles into the operating system for the Carel controllers; controlling ventilation systems typically in warehouse or car garage type environments
- Built many custom python applications to provide value in a variety of ways including:
    - pulling all values of current registers from a motor, matching those result with a corresponding definition for readability
    - reprogramming or troubleshooting existing motors already in the field
- Handled all database administrator type duties such as creating 3 different environments for development (dev, test, production), proper version control implementation, etc.

IT Application Developer — Liberty Utilities, Joplin, MO

Jan 2017 – Dec 2019

- Developed new enhancements and maintained existing functionality in Java for the company's internal Customer Information System application
- Created numerous simple to complex queries involving self joins and correlating sub-queries in order to satisfy data request using SQL (Oracle)
- Executed design and code reviews of software developed by other team member
- Deployed feature branches into test environments for client-side testers

Computer Engineering Intern — Niobrara Research & Development Corporation, Joplin, MO

Mar 2010 – Jan 2014

- Worked with back-end engineers, including sitting in during design reviews, to see projects through, from conception to completion

SKILLS

PROGRAMMING LANGUAGES

- **Python**
- **JavaScript**

FRAMEWORKS/ Libraries

- **Flask**
- **Bootstrap**
- **jQuery**
- **SQLAlchemy**

DATABASES

- **SQL/MySQL**
- **Postgres**
- **MongoDB**

TOOLS

- **Heroku**
- **AWS S3**
- **Visual Studio Code**
- **Git / Bitbucket**
- **SQL Workbench**

PROJECT EXPERIENCE -

ZOO Fans Internal Web App — Configure sales orders, program controllers, archive configurations for future reference

- Built using Python, Flask, SQLAlchemy, Javascript, MySQL Database, Alembic, Bootstrap, Jinja2, WTForms, Carel c.factory
- Utilizes Carel c.factory library to connect via ethernet to Carel controllers in order to install appropriate operating system and complete advance configuration on controller that is based on user selected configurations from within the web application
- Users can create custom fan definitions and assign them to fans on a given sales order; such that when fan motors are programmed using an additional internal application, the application uses the configuration saved in the database by this application, in order to determine the desired configuration for programming the fan motors

Time & Expenses Management Software — Records time/expenses + pdf invoice generation for company with 100+ employees

- Project utilizes Python, Flask, SQLAlchemy, Javascript, Postgres Database, Heroku, Alembic, Bcrypt, Bootstrap, Gunicorn, Jinja2, Reportlab, PyPDF2, WTForms, AWS S3, etc.
- Application uses role based authentication to allow admins to utilize the created admin panel in order to manage roles/users, create invoices, assign project/expenses to particular roles such that users with the associated assigned role can record time and/or expenses to a given project.

(projects below this line are available at craftyclark.com or github.com/craftyclark)

REST API GPS Data Application — Delivers data via API endpoints

- Project uses Python and Flask framework to deliver the requested data via REST API endpoints.
- 1.1 million lines of GPS data (CAN-Bus messages), monitoring agricultural tractors, were used in this project to in order to calculate results.

San Francisco Fire Department Data Application — Visualize response times

- Python project calculates how much time it takes for each of each San Francisco Fire Department District to arrive on scene after receiving a dispatch call.
- Over 5 million lines of CSV data was used in order to create a visualization per District of the total instances where the response times are 90th percentile or greater.

RSS Feed Application — Saves and parses rss data for users

- NodeJS app allows users to create account, log in, store desired rss-feeds, and view parsed data associated with the saved rss feeds.
- Deployed using heroku at http://rss-app-clark.herokuapp.com/ and uses mongoDB to store user names, hashed passwords, and saves rss feeds associated with each account.

EDUCATION

Pittsburg State University, B.S. Electronics Engineering Technology- 2012

University of Kansas, B.S. Computer Engineering — 2016