MATTHEW **STRONG**

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· https://github.com/peasant98

To leverage my interests in machine learning, robotics, and software development, I am seeking a software engineering internship to apply my skills in a meaningful and practical way.

ENGINEERING EXPERIENCE

02/18 – PRESENT
CO-FOUNDER AND CTO, UDANA SYSTEMS

I co-founded Udana Systems with my colleagues to provide autonomous drone delivery systems to both small and medium sized businesses. The product is still in development. I help lead the effort by providing technical expertise on the hardware and software as well as being the main engineer for the most intensive tasks. The code for the top three projects at the end of my resume can be found on the company's Github.
Website: udana.systems
Github: https://github.com/UdanaSystems

01/18 – PRESENT
RESEARCH ASSISTANT, CU BOULDER SUSTAINABLE BUILDINGS LAB

I am currently working with Ph.D student Yunyang Ye on an Energy Modeling Optimization project that aims to find the optimal building inputs to reduce energy usage through meta-models. I have been coding primarily in Python and used packages such as scikit-learn, numpy, and multiprocessing to reduce runtime of the Python scripts.

10/16 – 12/16
SOFTWARE ENGINEERING INTERN – HIGH SCHOOL, FLATIRON SOLUTIONS

I coded dynamic user-interactive lists through HTML, CSS, and Javascript. Additionally, I worked with Agile Methodologies and participated in a daily Scrum to learn from other developers as well as the CTO about best practices for software development.

EDUCATION

2O17 - PRESENT
COMPUTER SCIENCE BS, UNIVERSITY OF COLORADO BOULDER

GPA – 4.0
Relevant Coursework: Data Structures and Algorithms, Discrete Structures, Data Science, Computer Systems, Software Development Methodologies and Tools

TECHNICAL SKILLS

- **Mobile + App Development:** Django, Xamarin.Forms, Vue.js, Node.js, Express.js, React Native, Flutter
- **Primary Languages:** C#, Python, C++, C, Dart, HTML, CSS, Javascript
- **Machine Learning:** Numpy, Pandas, Scikit-Learn
- **Other:** Firebase, Arduino, AWS

RELEVANT PROJECTS

- **CU Courts Web Application** – A Django Web Application for Basketball Court Reservation at the CU Rec Center.
- **Paribus Charity App** - A Xamarin.Forms App with Braintree and a Django Backend that allows users to donate or receive money.
- **Udana HAWK Autonomous Drone System** – A system made up of a suite of applications to control an auto-leveling autonomous delivery drone through GPS tracking, SLAM, and machine learning.
- **NBA Machine Learning** – I have been implementing the NBA API to meaningfully apply my knowledge on SVM and SVR. The code is on my **Github**.