From: diablocaliente@yahoo.com

Sent: Tuesday, August 21, 2018 4:00 PM

To: ionathan.shelley@lmc.gatech.edu, cedric@cc.gatech.edu

Subject: CS 3311/LMC 3432 Project Bid

## Dear Dr. Shelly and Professor Stallworth:

Allow us to introduce ourselves. Our names are Cody Gains, Suzy Giarlando, and Kimberly Hastings. We are third year CS majors at Georgia Tech and all natives of Atlanta. We have extensive experience working on both industry sponsored projects and academic research ventures. Suzy and Kimberly recently completed internships at MailChimp and Google, respectively, where they gained first-hand experience designing, creating, and implementing front-end user interfaces. Cody recently completed work on a searchable patent database for Professor Alex BXXXXXXV that required extensive coding in both Python and Java. Our combined skills would allow us to bring value to any CS related project.

Our project rankings are as follows:

- 1.) High Speed Data Links
- 2.) Solar Panel Optimization
- 3.) Self-Driving E-Bike

We would like to be assigned the High Speed Data Links project because it sounds like the best one and, frankly, the other ones don't seem all that serious. The ability to transfer increasingly large amounts of data is essential for maintaining the efficiency of any university's network and operation, and the ability to improve such speed without the need for expensive hardware upgrades would be a significant cost-cutting measure. Cody's recent project with Professor BXXXXXXv allowed him to work collaboratively with university faculty and administration. Such experience would be instrumental for implementing whatever product we create.

Our second choice project is Solar Panel Optimization. Solar energy will be a necessary part of a sustainable energy future, and the sponsor company's development of solar panels that automatically tilt to avoid casting shadows on nearby panels is impressive. Both Suzy and Kimberly are uniquely equipped to help create a user interface for this technology given that they recently developed mobile app interfaces for major companies. As part of her internship, Kimberly also worked with the UX team to improve the accessibility of the company's existing product line.

Our third choice project is Self-Driving E-Bike. This project is intriguing because it has great growth. Ride-share bicycles are an increasingly ubiquitous feature of urban spaces in the United States, and the implementation of electric bikes would only improve the mobility and range of the average citizen. On the other hand, the recent implementation rentable electric scooters from companies like Bird may make bike share programs obsolete in five years. The main problem, however, is that the project intends to use the Rust Programming Language for its self-driving software and none of us have used Rust before.

Any of these projects would greatly help our professional development.

Kind regards, Cody, Suzy, and Kimberly