# ALYSON GOODMAN & RAY KING

HTTPS://WWW.LINKEDIN.COM/IN/ALYSON-GOODMAN-953B0523/

HTTPS://WWW.LINKEDIN.COM/IN/RAY-KING-A1A986B/

**Required Skills:**

Human Centered Design, Project Management, Communications

**Nice to have Skills:**

Mobile App Dev, Web App Dev, Java, Python, iOS, Android, Responsive Web Design

**Preferred Team Communications:**

Google hangouts

**Data Sources:**

Georgia Tech synthetic data will be sufficient for the project.

**Other Items:**

Project has timezone flexibility. Mentors and students will determine a good time for virtual meeting

Good communication skills are required.

## THE LABOR TRACKER

This project involves the development of a mobile phone or web-based application, the Labor Tracker, that would allow clinicians caring for obese women during labor to view a woman's cervical dilation progress on a graph that represents normal and abnormally slow labor progression according to that woman's BMI.

Obese women (BMI>30 kg/m2) are at elevated risk for cesarean delivery, with rates up to 5 times higher than normal weight women. Cesarean deliveries are most often indicated for obese women because of abnormally slow labor progression, a complication known as labor dystocia. In clinical practice, expectations of labor progress are not individualized by degree of maternal obesity, but instead are standardized based on the average rate of cervical dilation among healthy-weight women (about 1cm/hour). As a result, obese women are at increased risk of cesarean delivery simply because they do not proceed through labor as expected by the nurses and doctors who provide their intrapartum care.

## PROJECT OBJECTIVES

1-development of a BMI-individualized labor progression tracker for use by clinicians or patients.

2-integration in labor tracker as an interactive mechanism for determining start time of labor

3-Once start of labor time determined, partograph that allows for tracking of patient's cervical change progress through labor.

## SUCCESSFUL PROJECT

Effective implementation of 1+ of the listed objectives

**Intellectual Property: Project cannot share IP. The IP is owned by my organization. However, students will be recognized as contributors.**