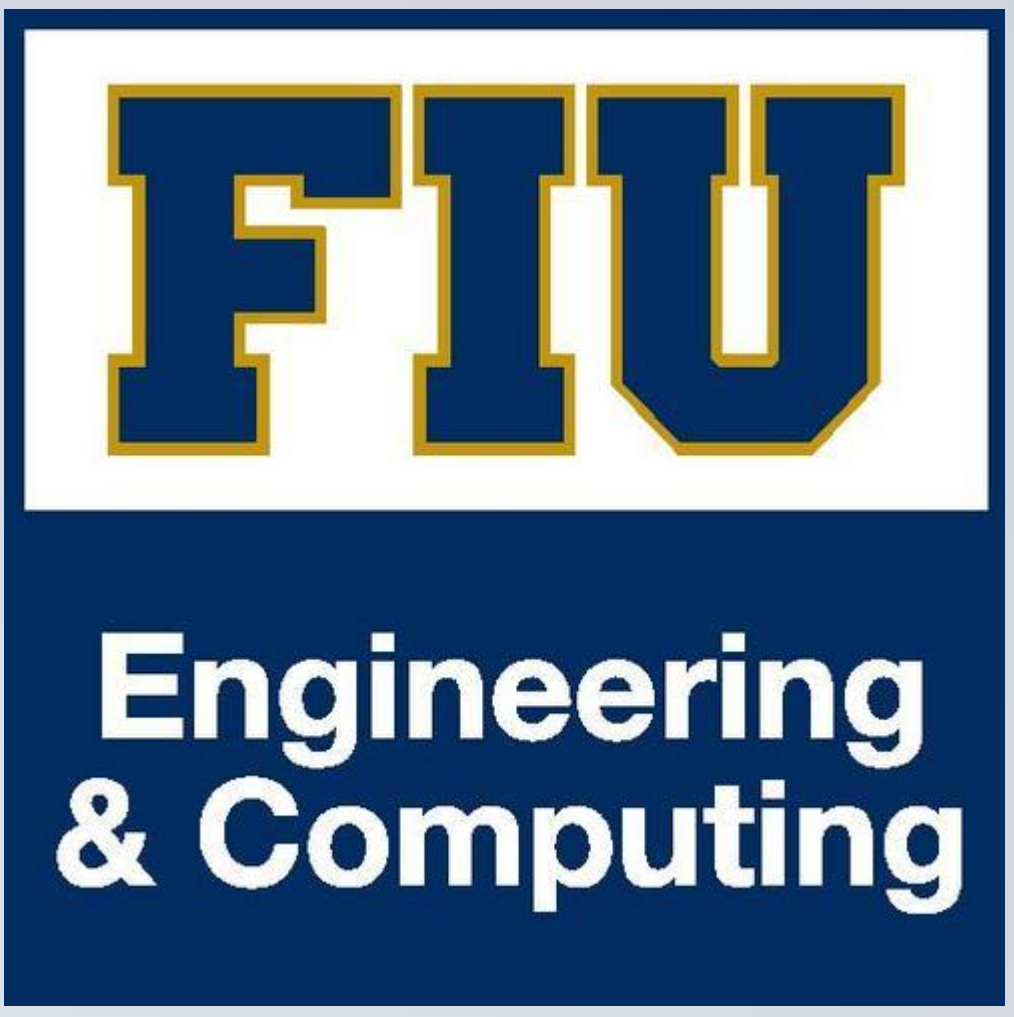




# BICYCLE POWERED WATER FILTRATION SYSTEM



## Problem Statement

Design a bicycle attachment to purify and transport water from contaminated sources that is activated while the rider is pedaling.

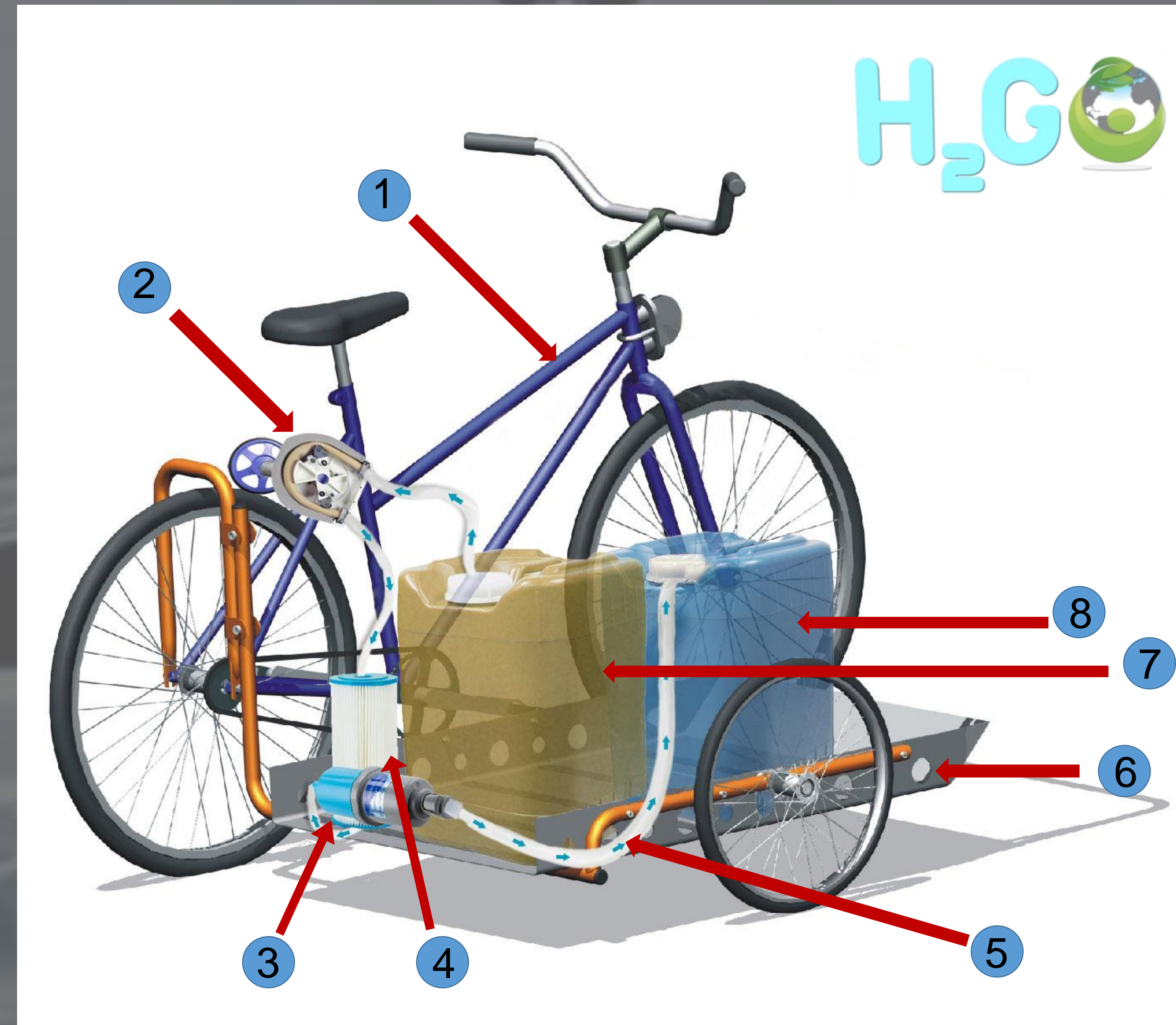
## Objectives

- Further aid in providing safe drinking water worldwide.
- Create an attachment that can be retrofitted to any bicycle.
- Provide a working solution that mends the problem until a more permanent can be established.

## Motivation

- 1 in 8 people worldwide do not have access to safe and clean drinking water.
- The average distance that women and children walk for water in Africa and Asia is 3.7 miles.
- The average container for water collection in Africa, the jerry can, weighs over 40 pounds when full.

## Conceptual Design



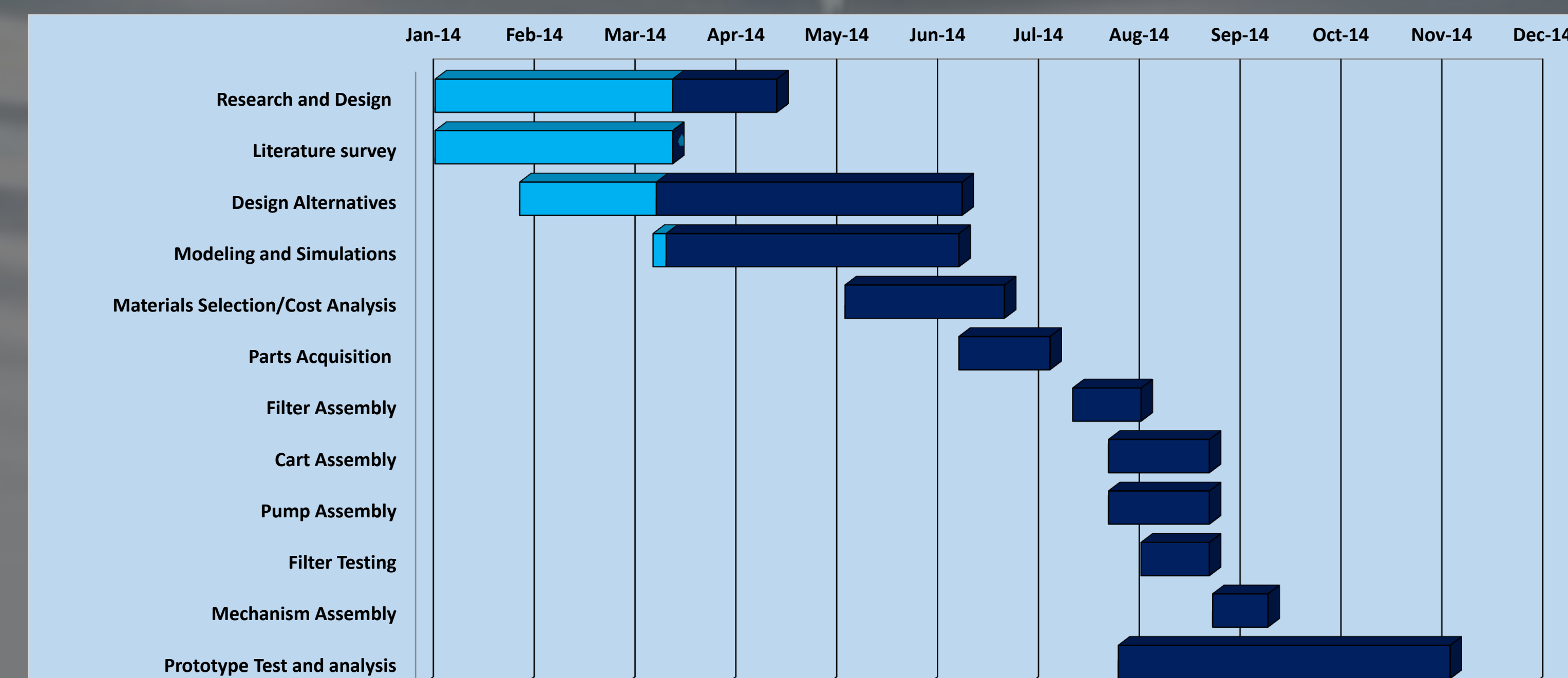
## Design Considerations

- Low maintenance pump
- Portability of side car and filtration system
- Durability of filters

## Components

1. Bicycle
2. Peristaltic pump
3. 3-Way inline Filter
4. Sediment Filter
5. Tubing
6. Side cart
7. Dirty water container
8. Clean water container

## Timeline



## Team Members



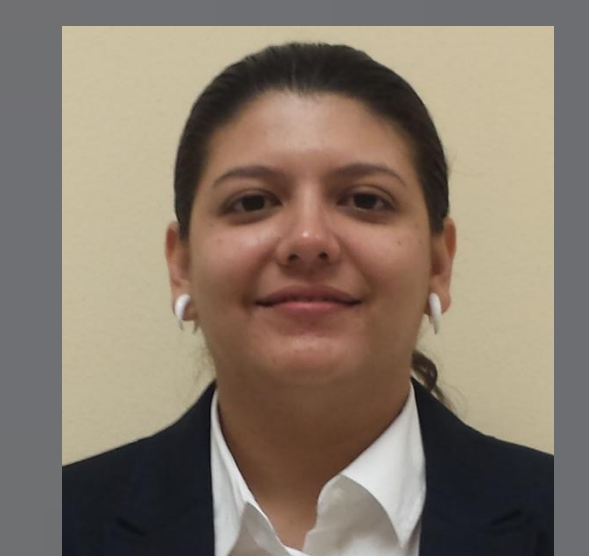
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