

# Carried Away: Autonomous Luggage Samin Riazi, Sherlin Kazi, Shahreare Khan, Abrar Zaman, Ralph Tran

### BACKGROUND AND GOALS

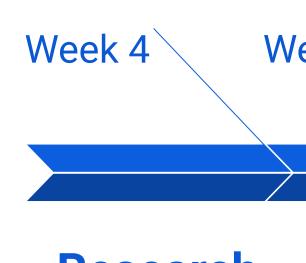
- Our goals is to build an automatic luggage that has motor and follows you with GPS and Bluetooth technology.
- This luggage helps people to have hassle free travel without the need for them to pull their multiple luggages around while traveling.

#### PROJECT PROGRESS

- Researched about autonomous luggage and technologies that could help us with building the device.
- Developed the gantt chart
- Purchased parts for the project
- Designed the hardware
- Started working on software

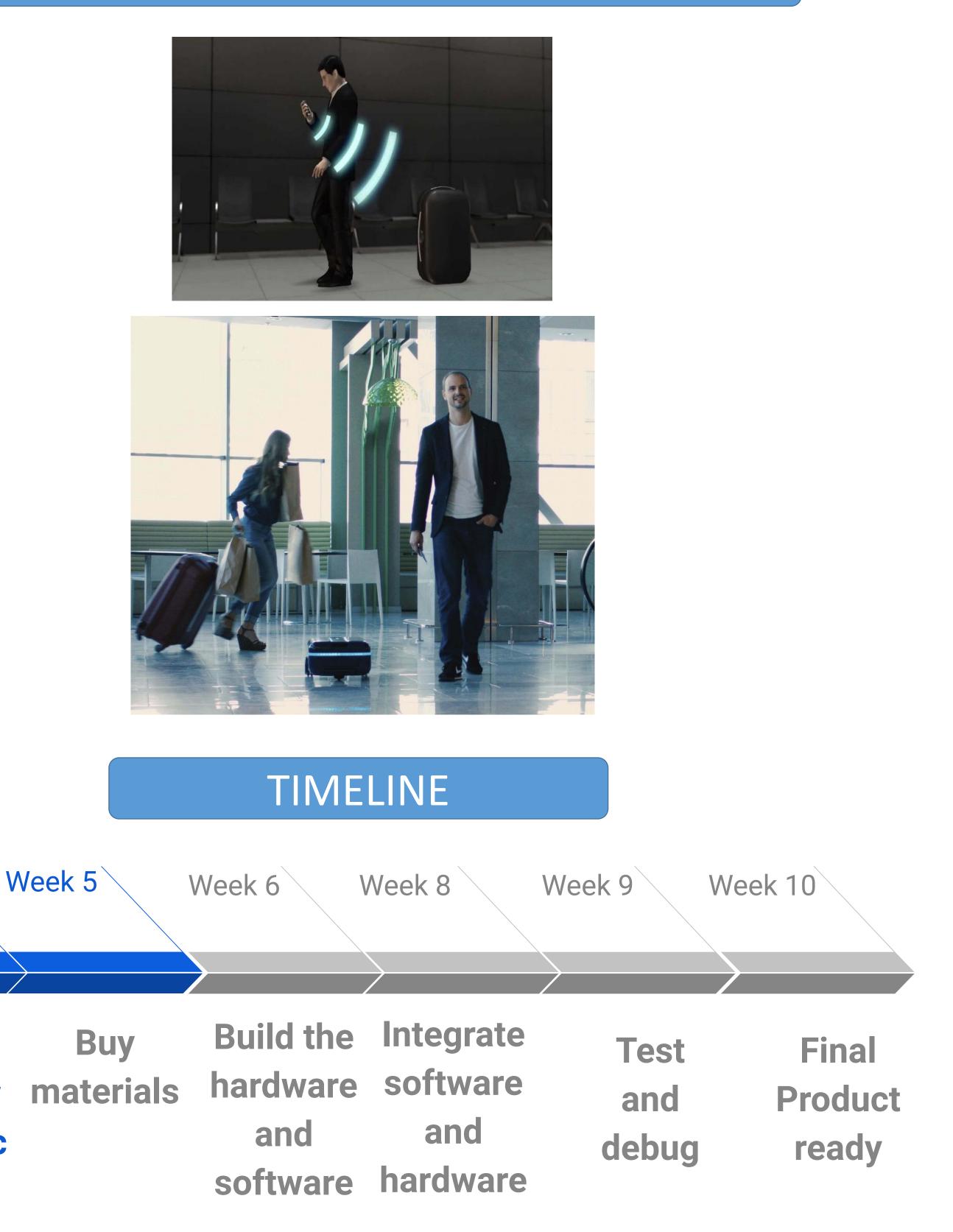
# CHALLENGES

- Coding to connect via Bluetooth and follow via GPS/IR
- Integrating software and hardware
- Optimizing GPS following algorithm



Research and Draw Schematic Riazi, Sherlin Kazi, Shahreare Khan, Abrar Zaman, Ralph Tran Professor Kleinfelder Department of Electrical Engineering and Computer Science

#### DIAGRAMS



UCI Samueli School of Engineering

# HARDWARE & SOFTWARE

- Arduino
- GPS sensors
- Bluetooth Transmitter/ Receiver
- Infrared Sensors
- Android API
- Gyroscope
- DC Motor
- Motor Driver
- Wheels
- Luggage

## FUTURE WORK

- Update system schematics as progress is made
- Build the hardware
- Write the software
- Test the hardware and software individually
- Integrate our system and debug

# REFERENCES

- 1) Qureshi, Ali, et al. "Remote Controlled Carry-on and Checked Luggage Carrier for High Loads." *FLorida Atlantic University*, 2013 Available: http://public.eng.fau.edu/design/fcrar2017/papers/RemoteControlledCarry-on.pdf
- 2) Md. Khanh, et. al. "Automated Luggage Carrying System" American Journal of Engineering Research, vol 02, no. 11, 2013 Available: http://ajer.org/papers/v2(11)/G02116170.pdf