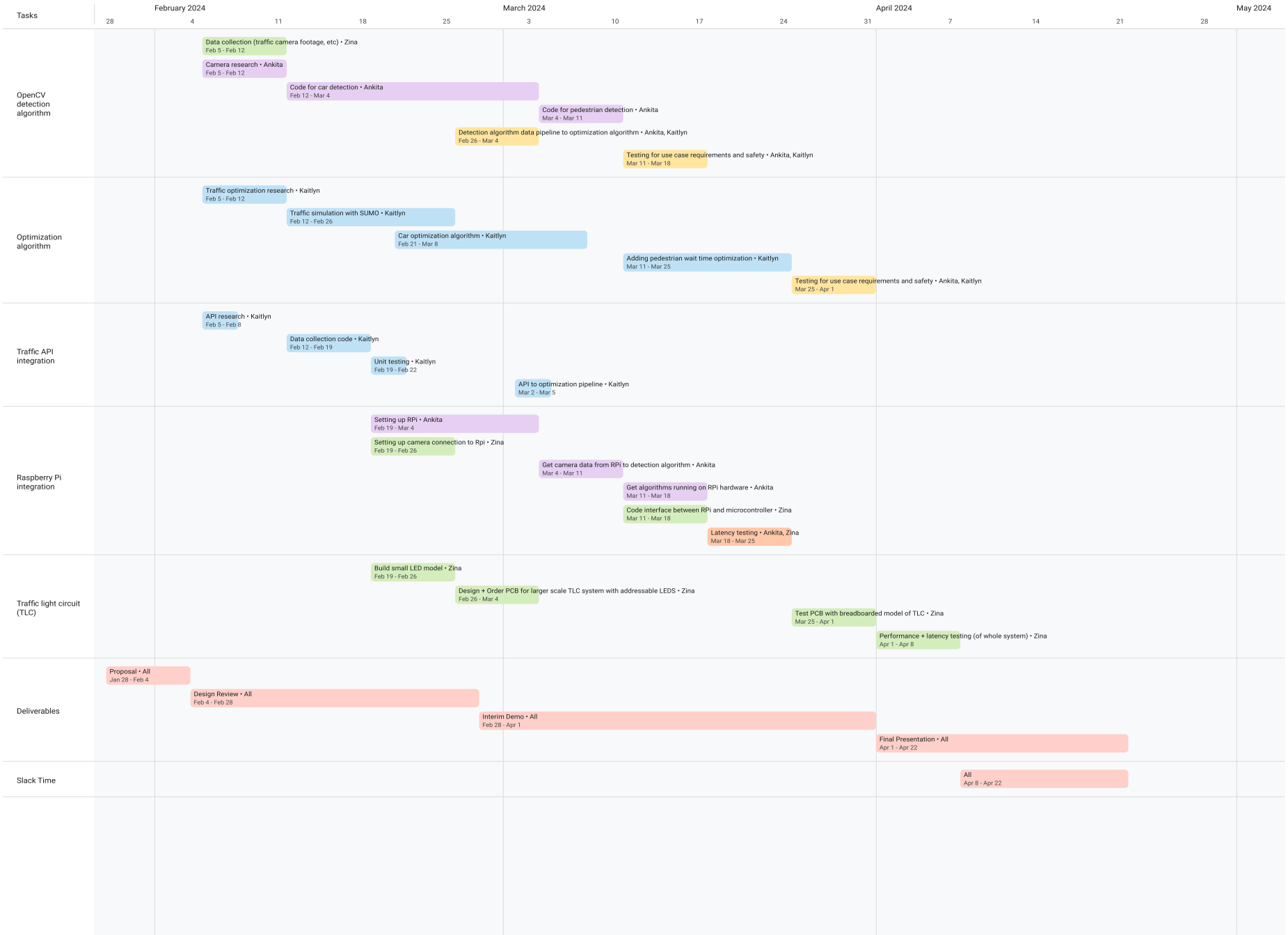
Tasks
February 2024
28
4
11
18
25
March 2024
3
10
17
24
31
April 2024
7
14
21
28
May 2024
OpenCV detection algorithm
Data collection (traffic camera footage, etc) • Zina
Feb 5 - Feb 12
Camera research • Ankita
Feb 5 - Feb 12
Code for car detection • Ankita
Feb 12 - Mar 4
Code for pedestrian detection • Ankita
Mar 4 - Mar 11
Detection algorithm data pipeline to optimization algorithm • Ankita, Kaitlyn
Feb 26 - Mar 4
Testing for use case requirements and safety • Ankita, Kaitlyn
Mar 11 - Mar 18
Optimization algorithm
Traffic optimization research • Kaitlyn
Feb 5 - Feb 12
Traffic simulation with SUMO • Kaitlyn
Feb 12 - Feb 26
Car optimization algorithm • Kaitlyn
Feb 21 - Mar 8
Adding pedestrian wait time optimization • Kaitlyn
Mar 11 - Mar 25
Testing for use case requirements and safety • Ankita, Kaitlyn
Mar 25 - Apr 1
Traffic API integration
API research • Kaitlyn
Feb 5 - Feb 8
Data collection code • Kaitlyn
Feb 12 - Feb 19
Unit testing • Kaitlyn
Feb 19 - Feb 22
API to optimization pipeline • Kaitlyn
Mar 2 - Mar 5
Raspberry Pi integration
Setting up RPi • Ankita
Feb 19 - Mar 4
Setting up camera connection to Rpi • Zina
Feb 19 - Feb 26
Get camera data from RPi to detection algorithm • Ankita
Mar 4 - Mar 11
Get algorithms running on RPi hardware • Ankita
Mar 11 - Mar 18
Code interface between RPi and microcontroller • Zina
Mar 11 - Mar 18
Latency testing • Ankita, Zina
Mar 18 - Mar 25
Traffic light circuit (TLC)
Build small LED model • Zina
Feb 19 - Feb 26
Design + Order PCB for larger scale TLC system with addressable LEDS • Zina
Feb 26 - Mar 4
Test PCB with breadboarded model of TLC • Zina
Mar 25 - Apr 1
Performance + latency testing (of whole system) • Zina
Apr 1 - Apr 8
Deliverables
Proposal • All
Jan 28 - Feb 4
Design Review • All
Feb 4 - Feb 28
Interim Demo • All
Feb 28 - Apr 1
Final Presentation • All
Apr 1 - Apr 22
Slack Time
All
Apr 8 - Apr 22