

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