Online Offline Supervisor $\alpha(t) = f(x_v(t), x_m(t))$ $max_{\sigma Fc Fg} \alpha(t) T(\sigma, F_c, F_g) + (1 - \alpha(t)) / P(\sigma, F_c, F_g)$ **Profiling** $x_v(t), x_m(t)$ σ , F_c , F_g Throughput Vanishing point with hardware optimizations → RANSAC → Error Image from Camera Power 2.4 GHz Vehicle $x_v(t), x_m(t)$ $\omega(t)$ **Controller**