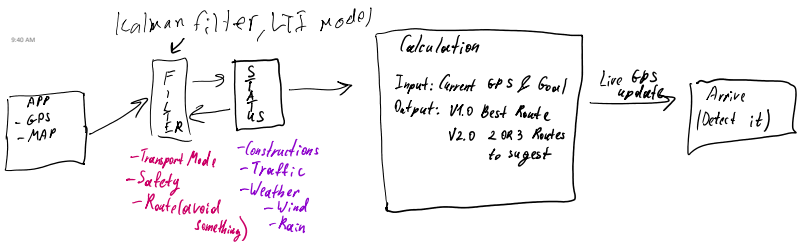
High-Level

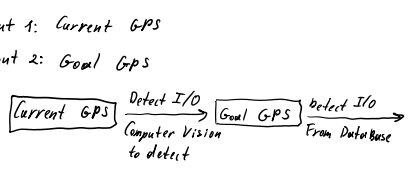
Tuesday, October 8, 2024 9:40 AM

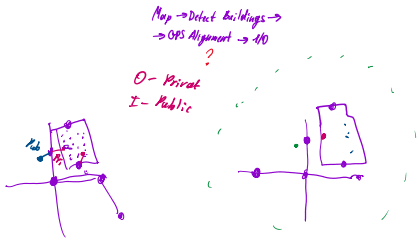


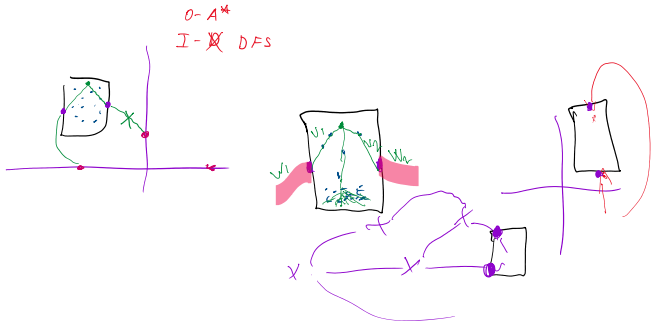
Calculation

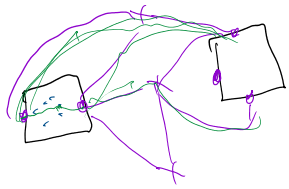
Input 1: Current GPS

Input 2: Goal GPS









$$\dot{\hat{x}} = A\hat{x} + Bu + L(y - \hat{y})$$

$$\hat{y} = C\hat{x}$$

u: input (people coming)

y: output (measurement)

x: intermediacies

$$\dot{x} \approx \frac{x_{t+1} - x_t}{2}$$

$$\dot{\hat{x}} = A\hat{x} + Bu$$

$$\hat{y} = C\hat{x}$$

$$Y(s) = C((sI - A)^{-1}BU(s)$$

$$y(t) = g(t) * u(t)$$

$$x(t) = g_2(t) * u(t)$$