

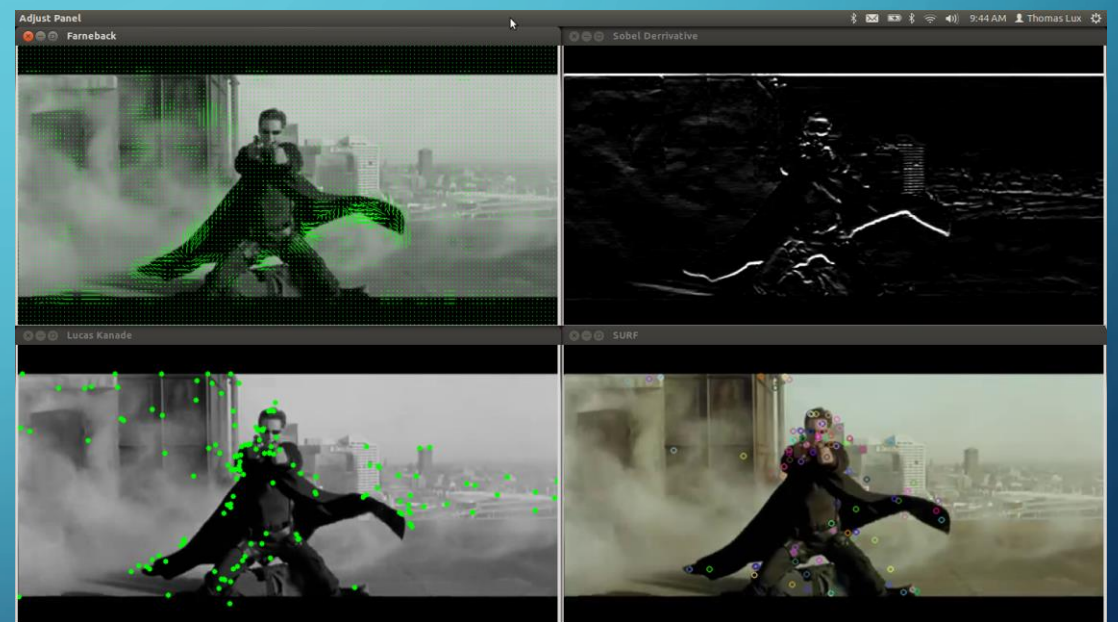
A decorative graphic on the left side of the slide, consisting of a network of white lines and circles on a blue gradient background. The lines are vertical and horizontal, with some diagonal segments, and the circles are of varying sizes, resembling a circuit board or a neural network diagram.

# Computationally Limited Monographic Optical Flow Tracking

Thomas Lux

Using a single camera video to track the movement of objects for the purpose of robotic navigation in three dimensional space.

# Testing Known Algorithms



# Cool! But why?

- Cameras are mass produced, videos are everywhere!
- Smartphones and other small computing devices are readily available.
- Mobile robots require lightweight hardware and have limited computing power.

# CHALLENGES

- Turning my thoughts into words used by previous works.
- Getting previously created algorithms to work.
- Knowing when it is better to be creative and follow my thoughts versus when I should focus on finding and understanding previous works.

