Meros: Remapping Light in the Urban Journey

Thesis Research 2008

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Core Concept:

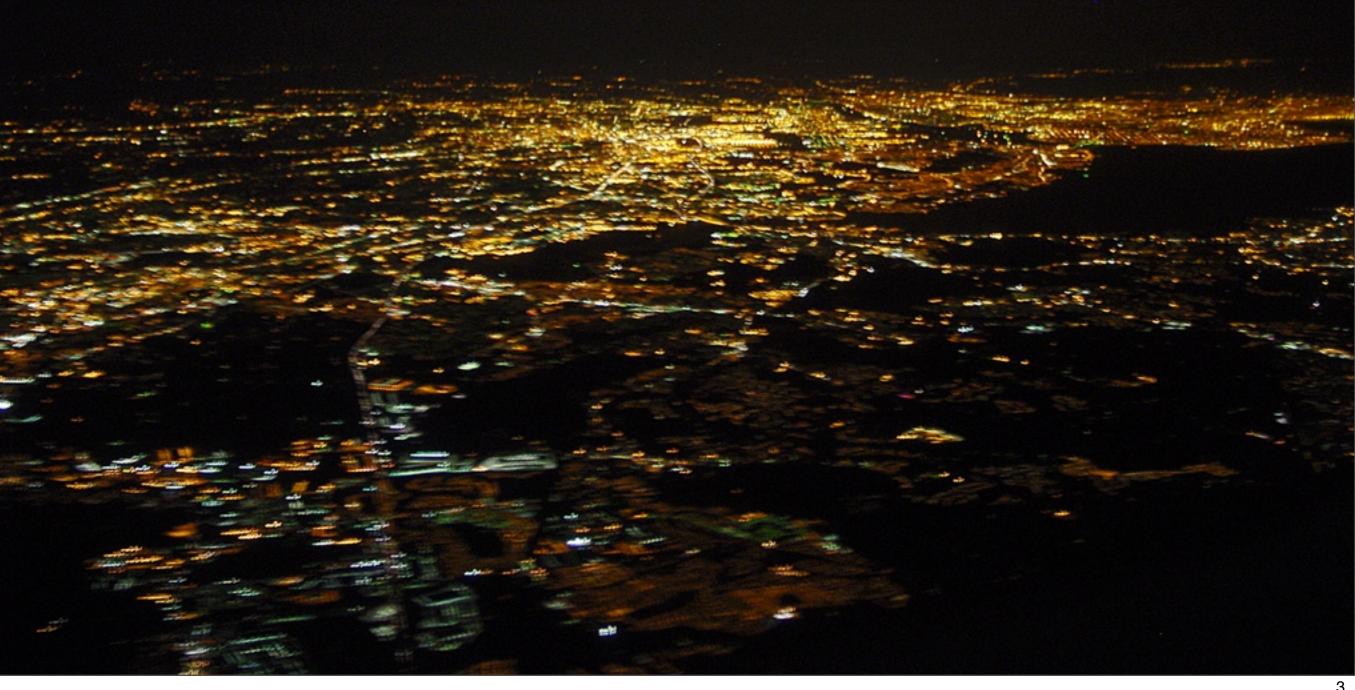
Looking at how we move through the spaces we live in...



Core Concept:

Looking at how we move through the spaces we live in...

and the light we experience.



Record the paths taken on a bicycle, and the light that was encountered.

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Then, use the data to map familiar places with new and unnoticed features.

- Capturing Light Details
 - Mapping
 - Aesthetic Inspirations
 - Implementation
 - The Results!

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 - Mapping
 - Aesthetic Inspirations
 - Implementation
 - The Results!

...But first, why?

Why?

The beauty of the everyday journey is lost in a sea of noise.

Why?

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Creating artwork in a process of exploring daily travels and experiences can bring this beauty out.

Light

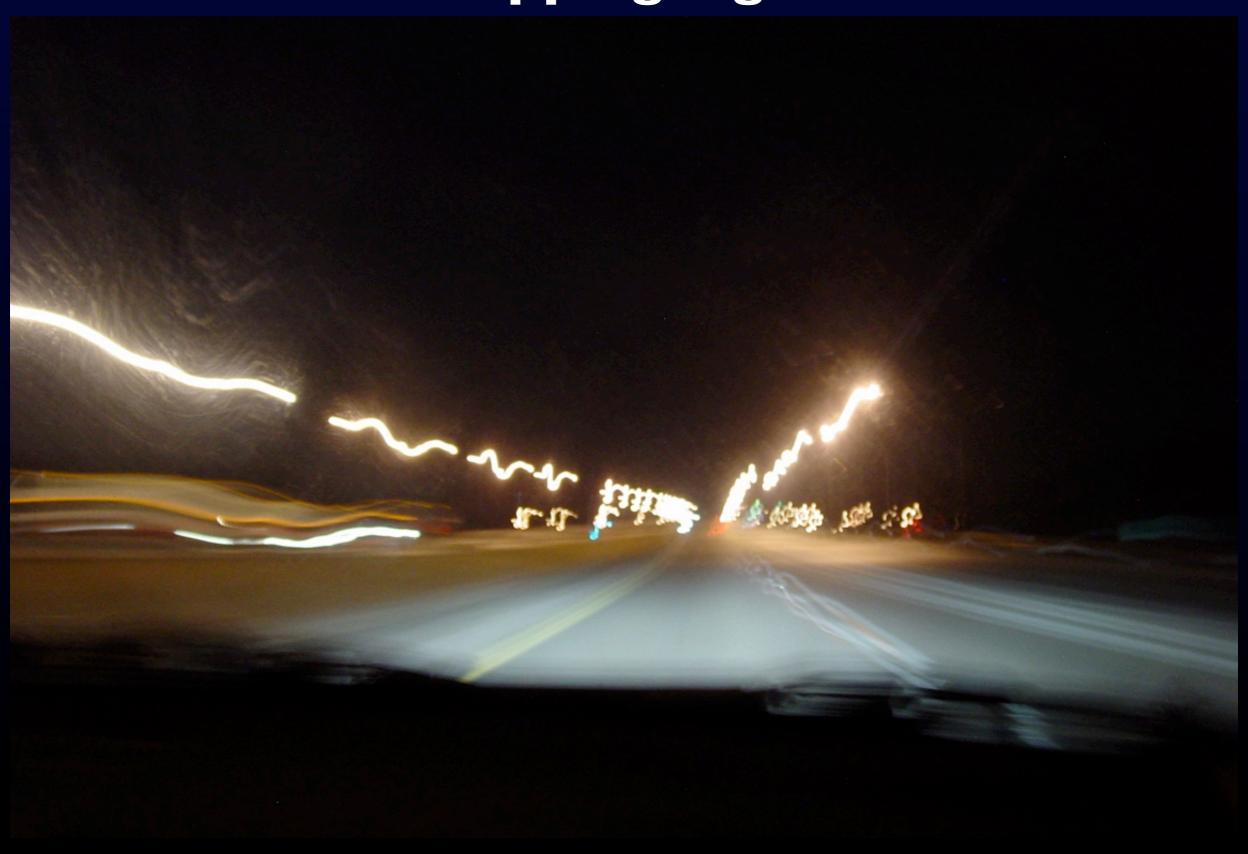
NB: Video not exported to PDF version.





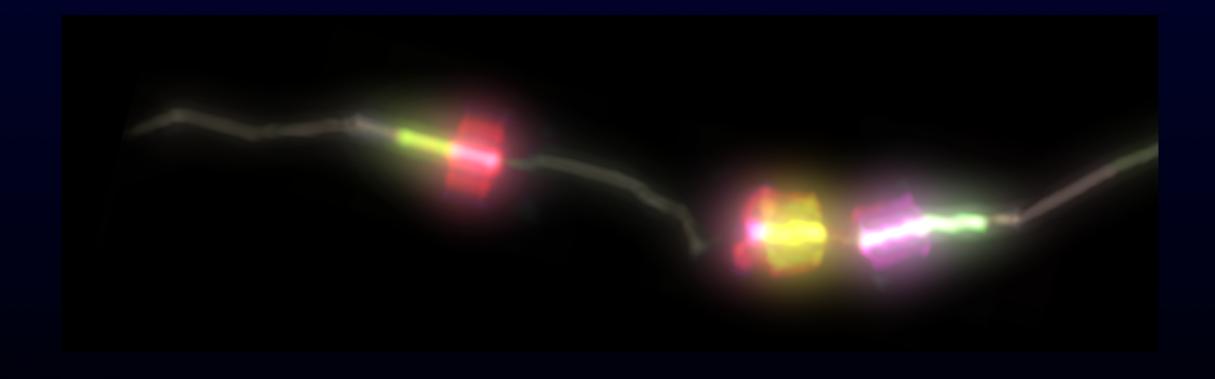


8 Second Exposures Map Light Artifacts





Street Lamps and an Intersection



Traffic Signals and Chinese Food

Traditional Mercator Projection: Area Inaccurate



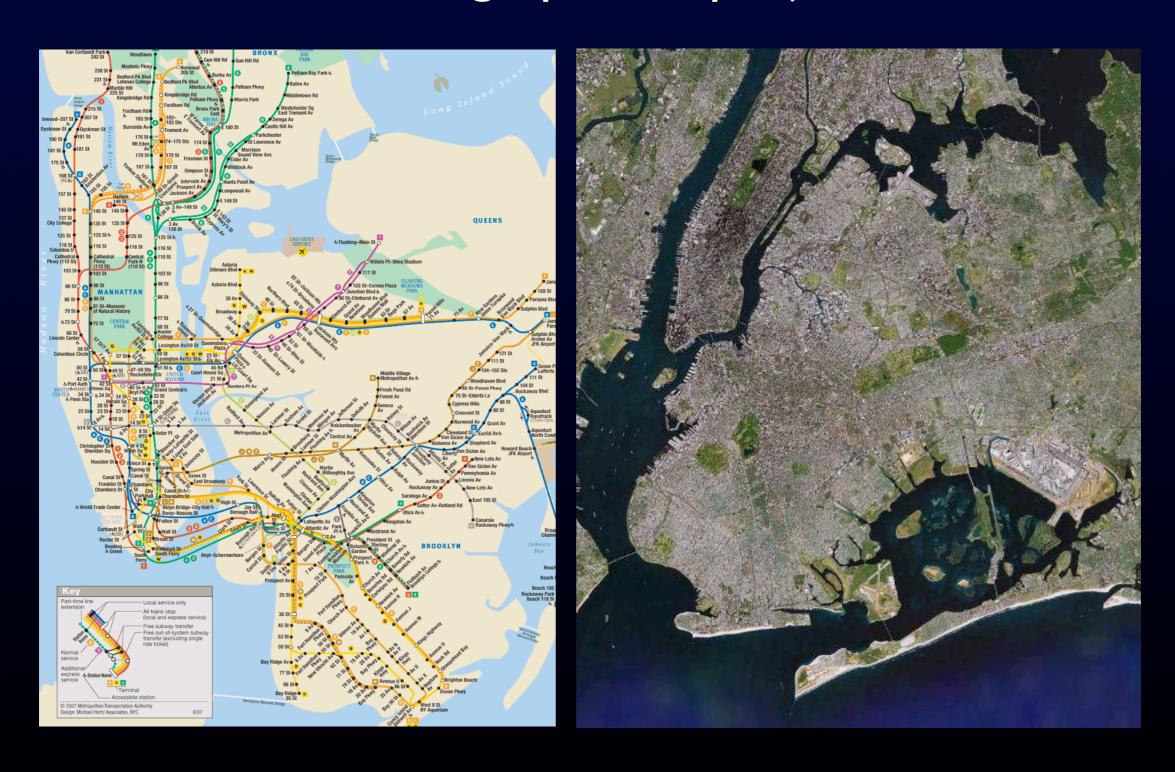
Great for Sea Travel

South Pole Projected Up



Great for Australia!

Local Geographic Reprojection

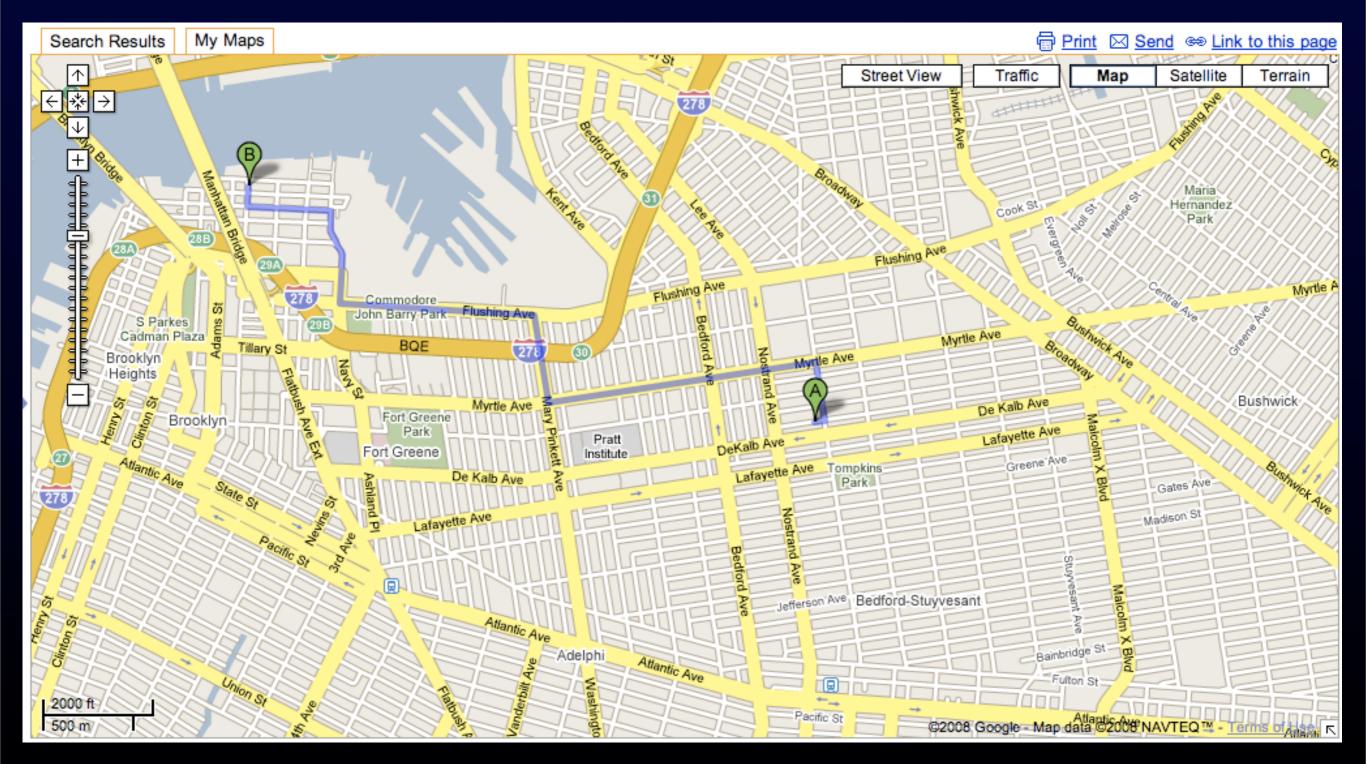


Subway Remapping for Travel

The World at Night: Light as a Narrative

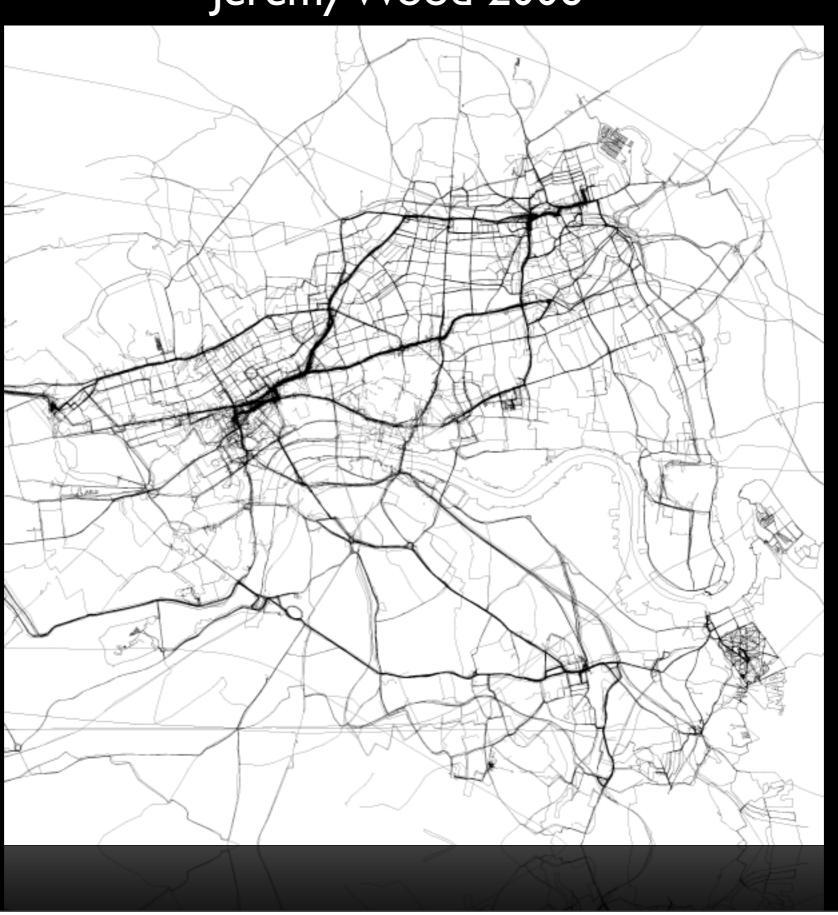


Using Lines in Mapping

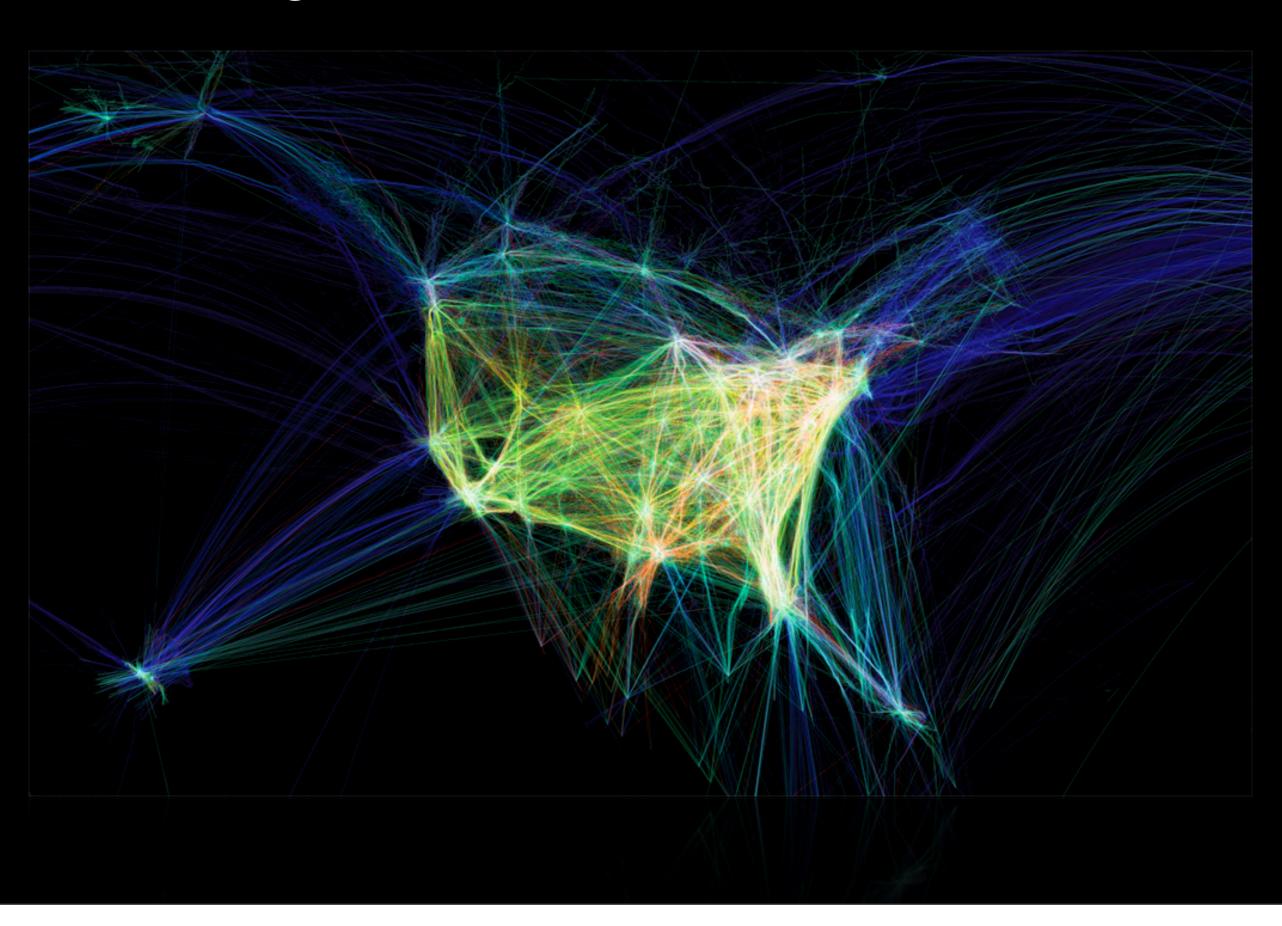


Boundaries and Directions

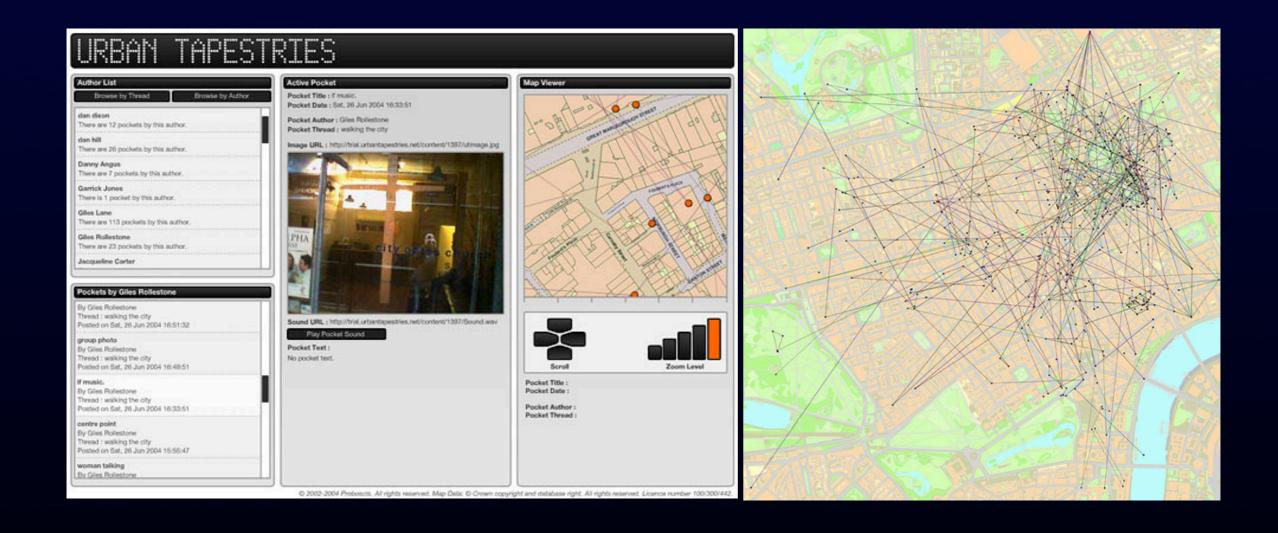
GPS tracks over London, England Jeremy Wood 2006

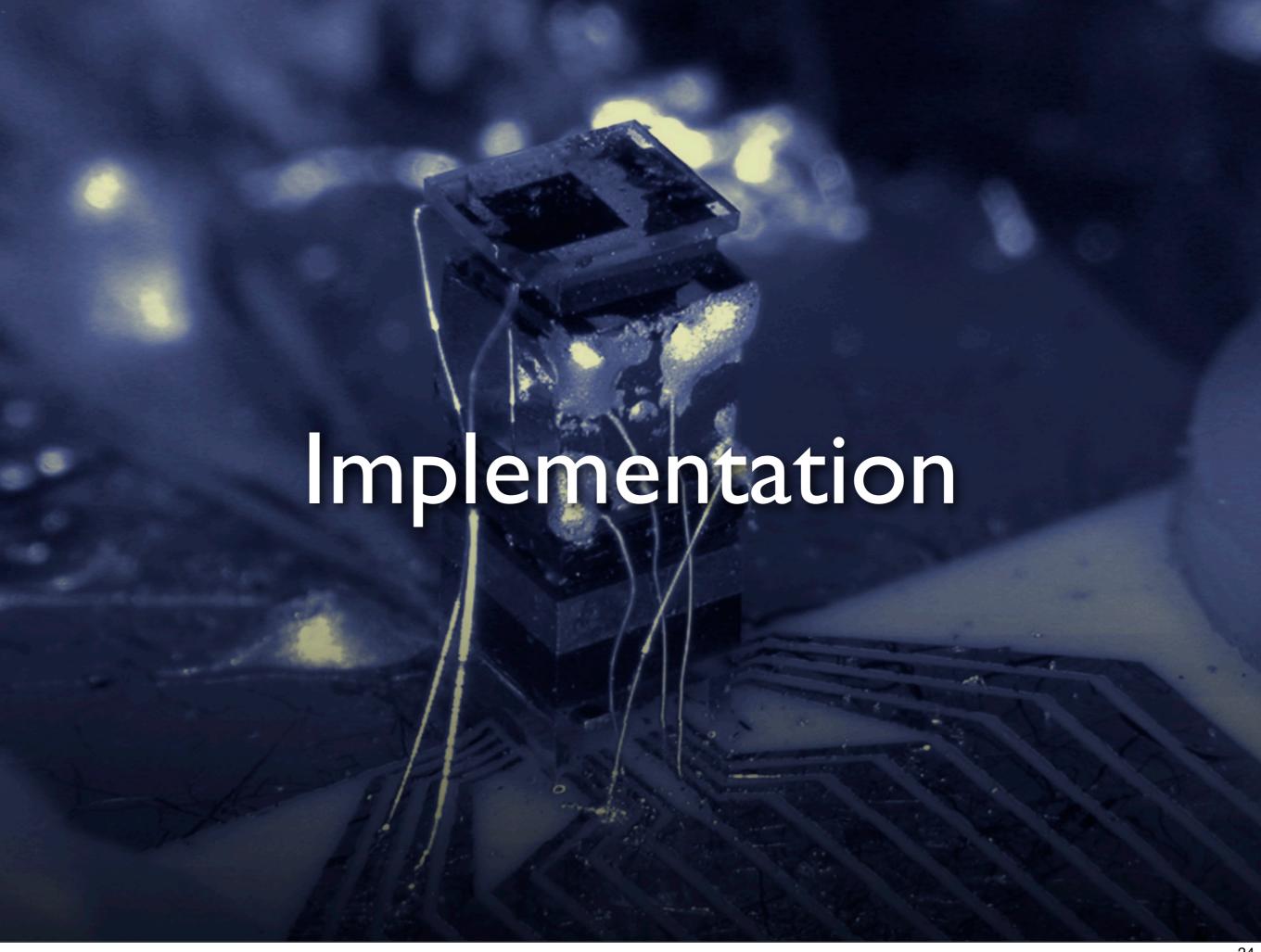


Flight Patterns -- Aaron Koblin 2005



Social Fabric and Networked Experiences Proboscis 2004





Bicycle chosen for reasons of



Bicycle chosen for reasons of Range and mobility



Bicycle chosen for reasons of

Range and mobility Sustainable alternative



Bicycle chosen for reasons of

Range and mobility
Sustainable alternative
Mechanically ideal for tracking



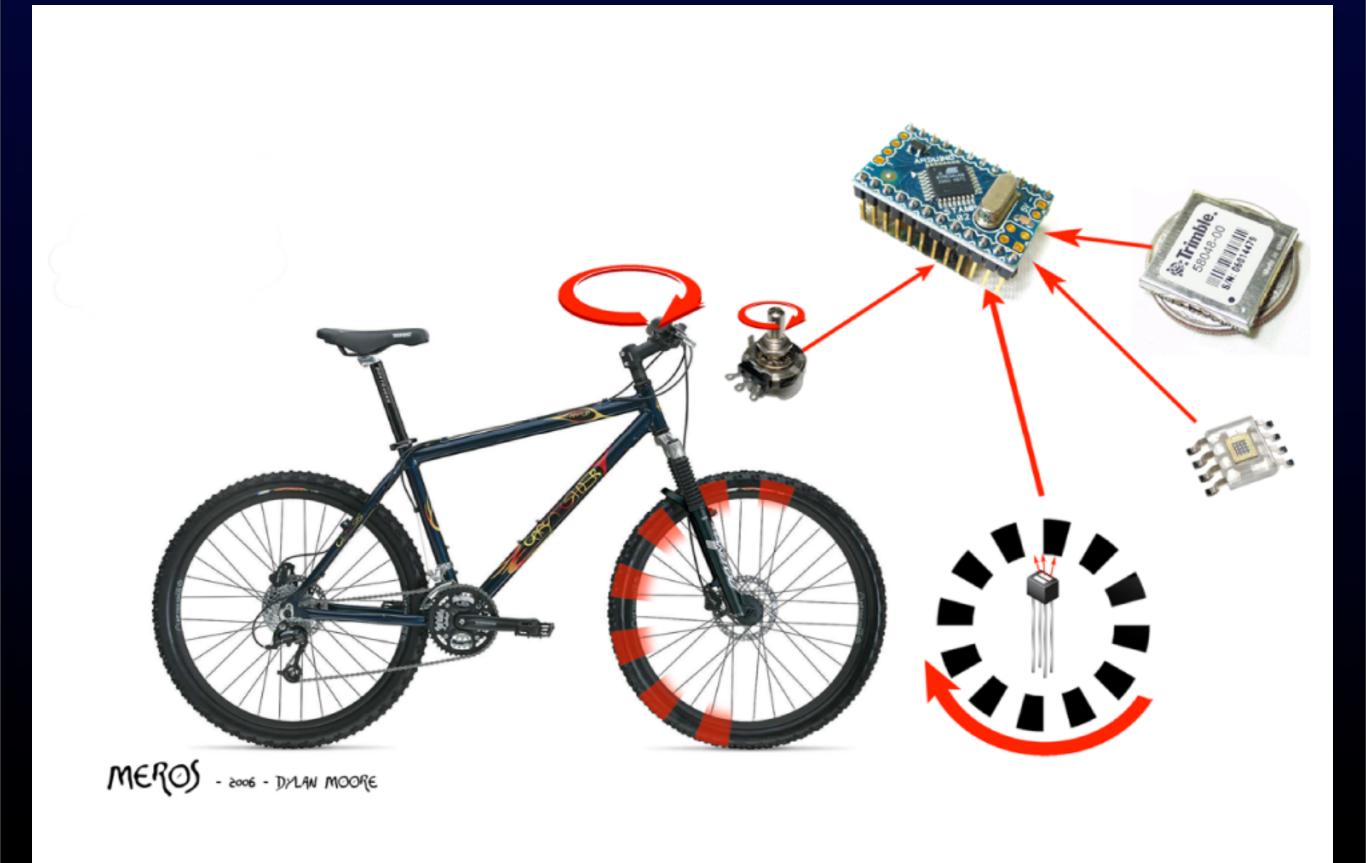


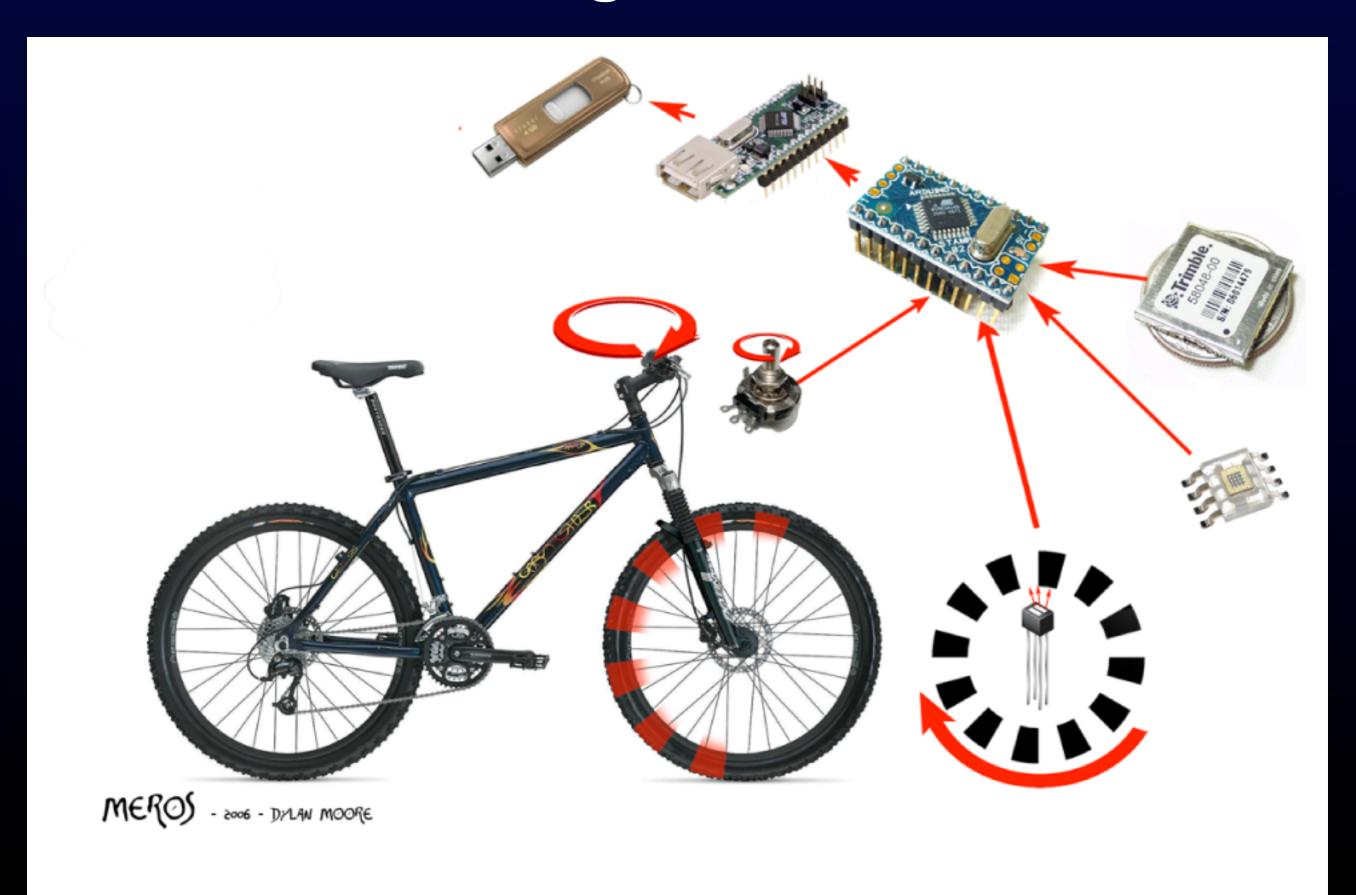
Reconstructing Paths

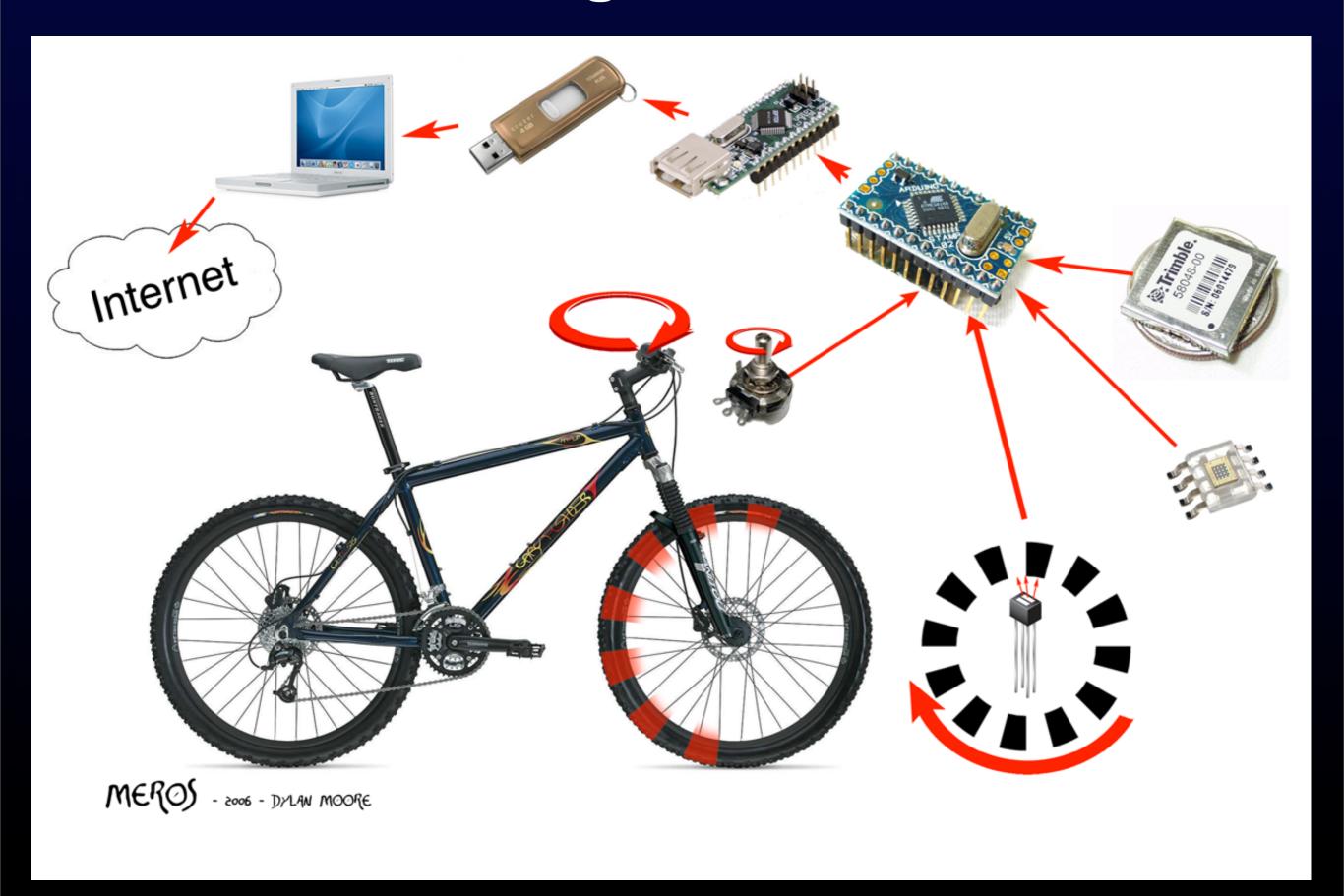












Global Positioning System

Why Use Rotary and Optical Encoding?

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I Hz Update Rate: Frequent Enough?

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(22 Feet per update, at 15 mph)

Why Use Rotary and Optical Encoding?

I Hz Update Rate: Frequent Enough?

+/- 5 Meters: Accurate Enough?

Why Use Rotary and Optical Encoding?

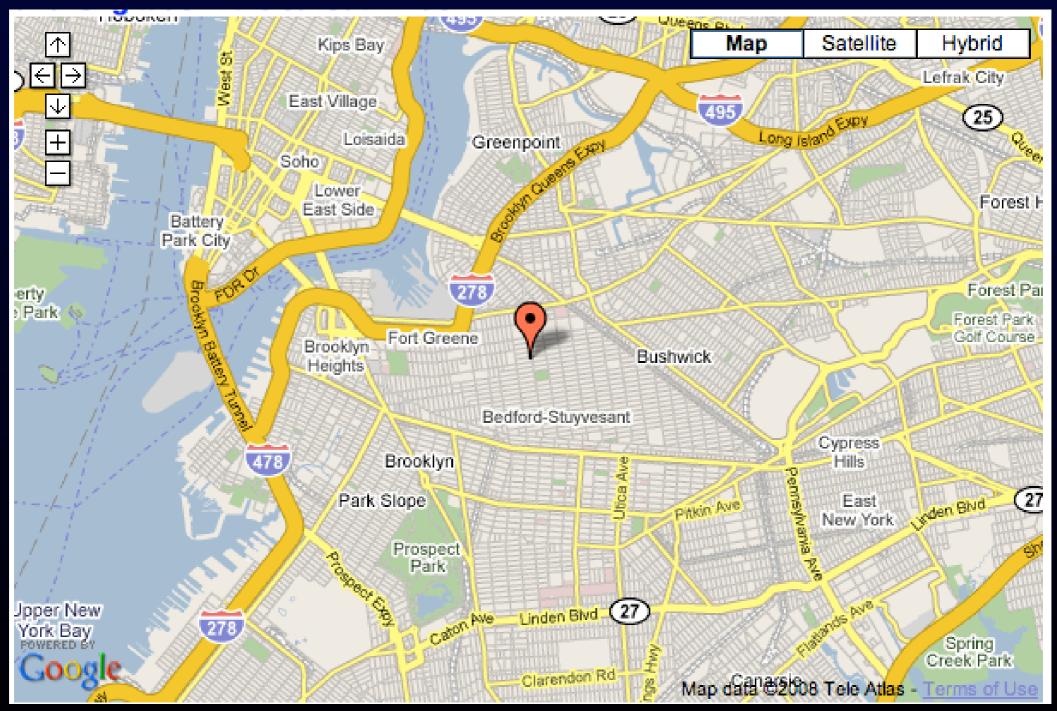
I Hz Update Rate: Frequent Enough?

+/- 5 Meters: Accurate Enough?

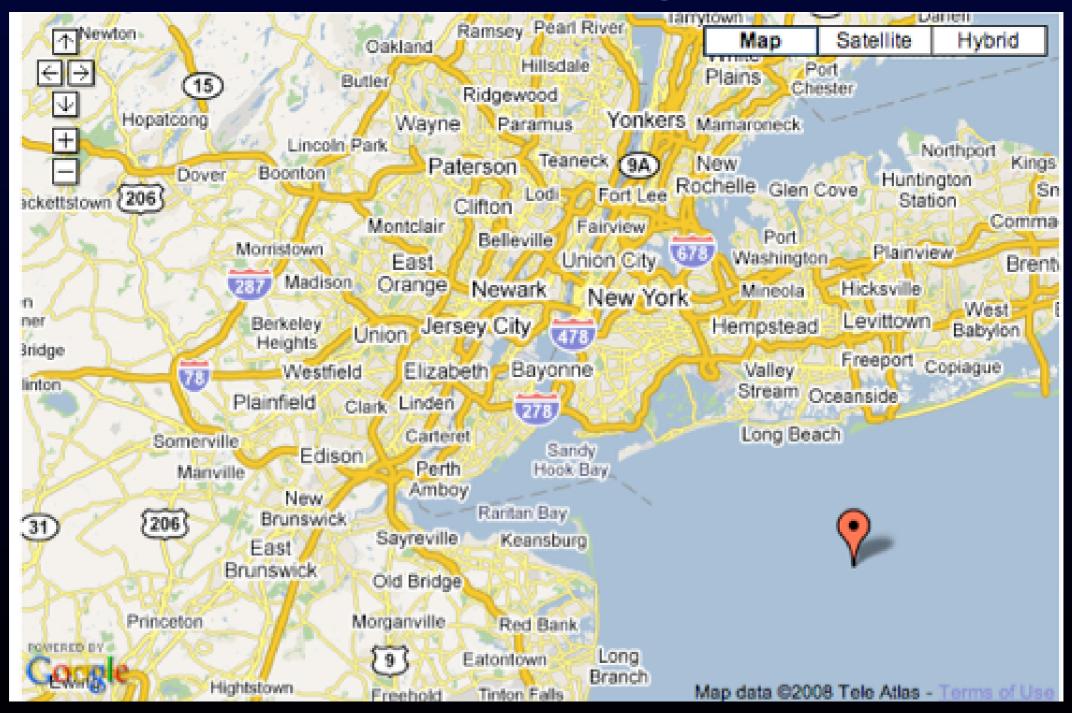
Urban Canyon Effect!



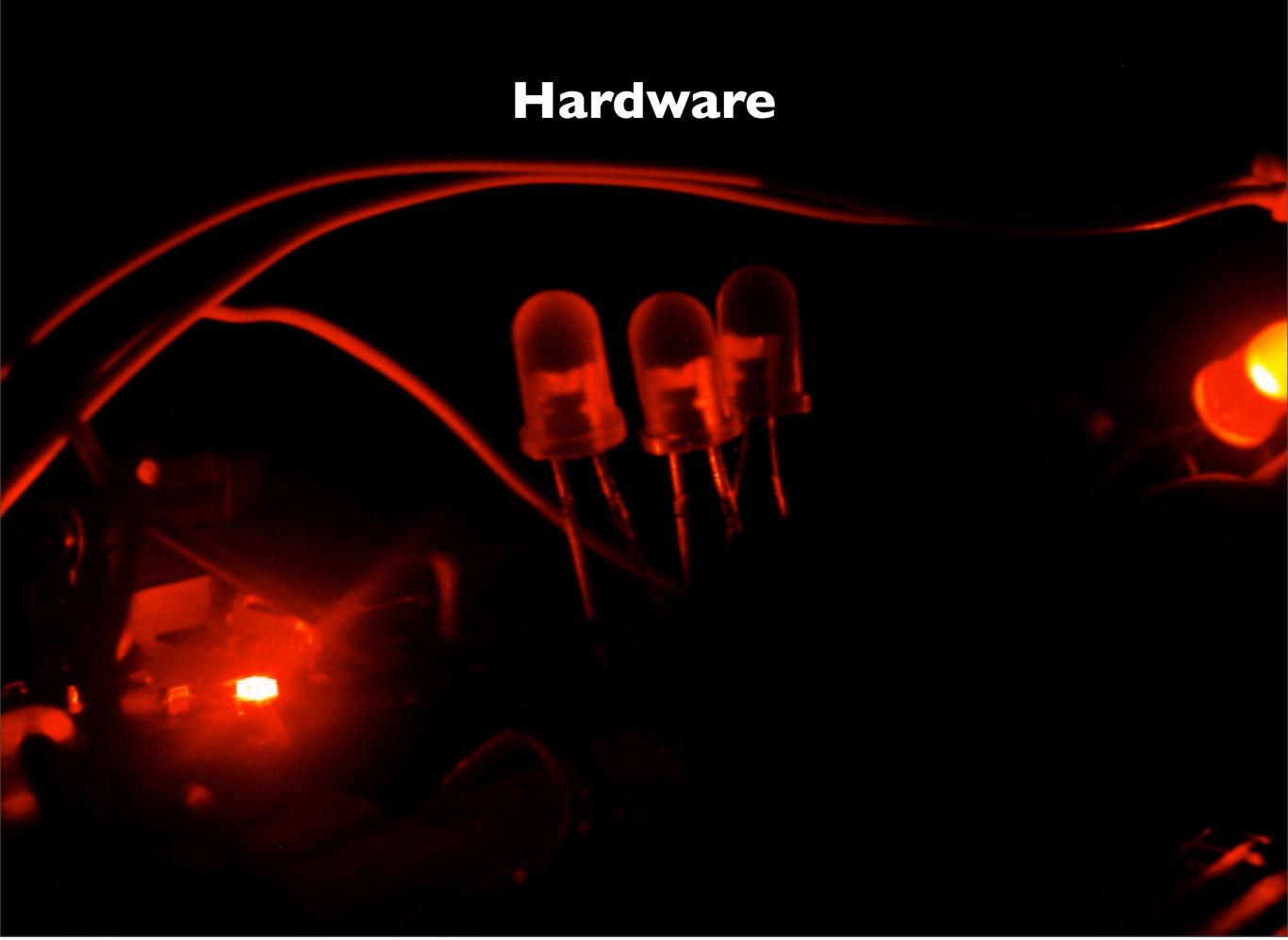
Urban Canyon Effect

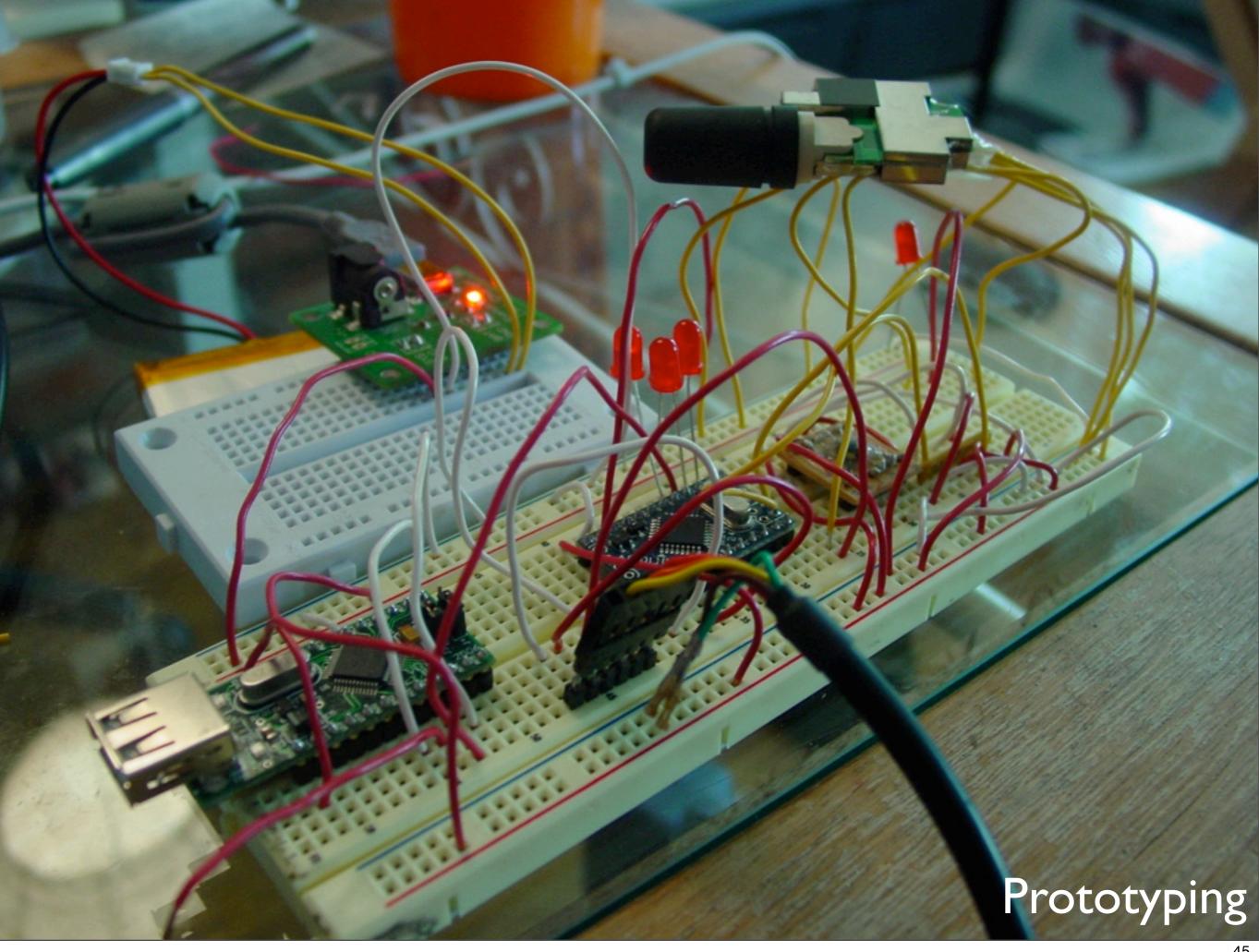


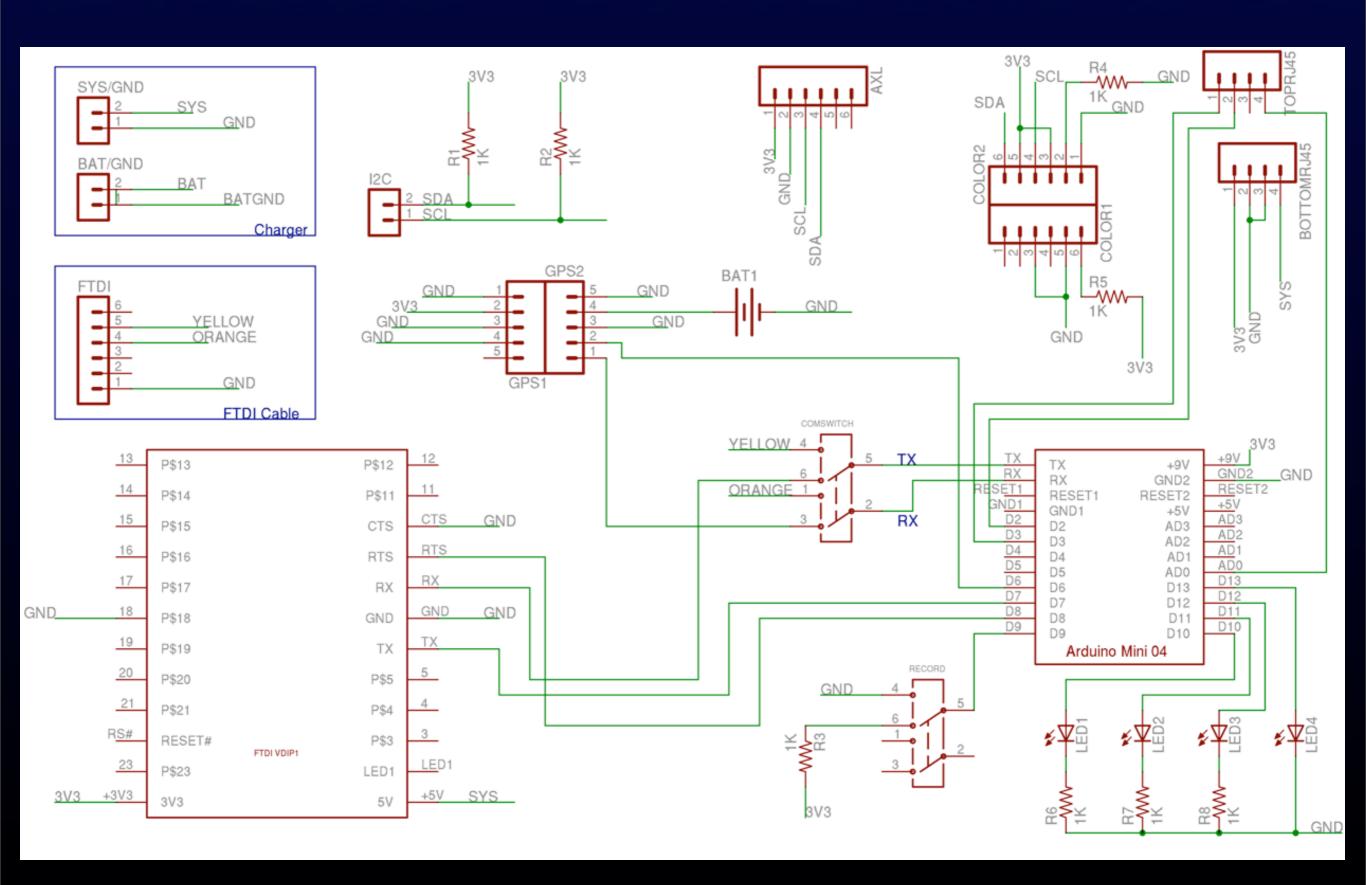
Urban Canyon Effect



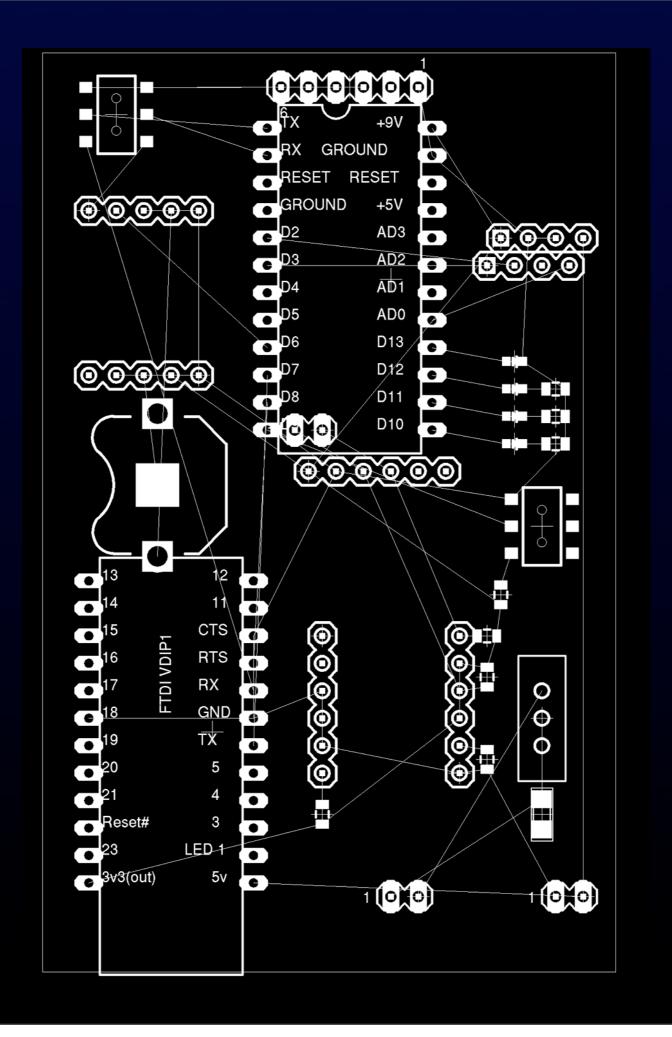
(My Apartment is NOT in the Atlantic Ocean.)



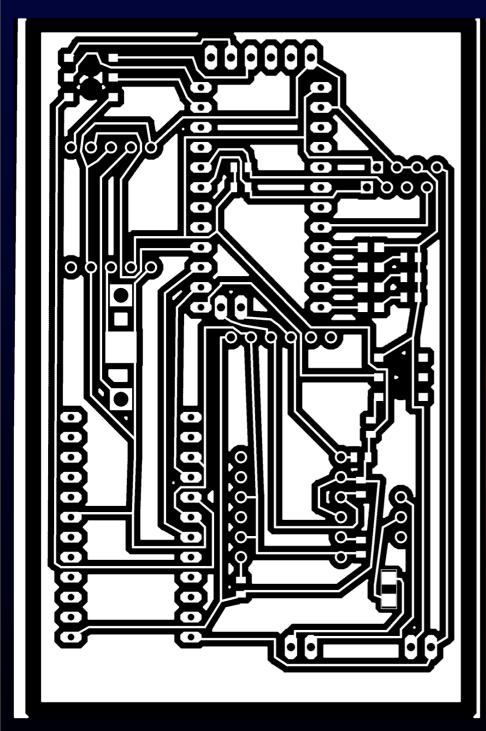


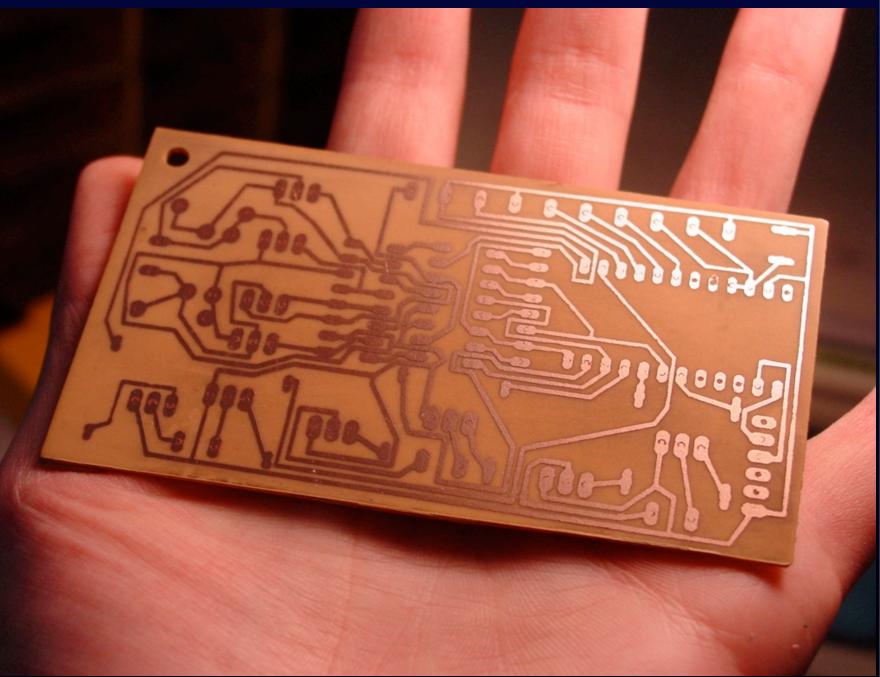


Schematic

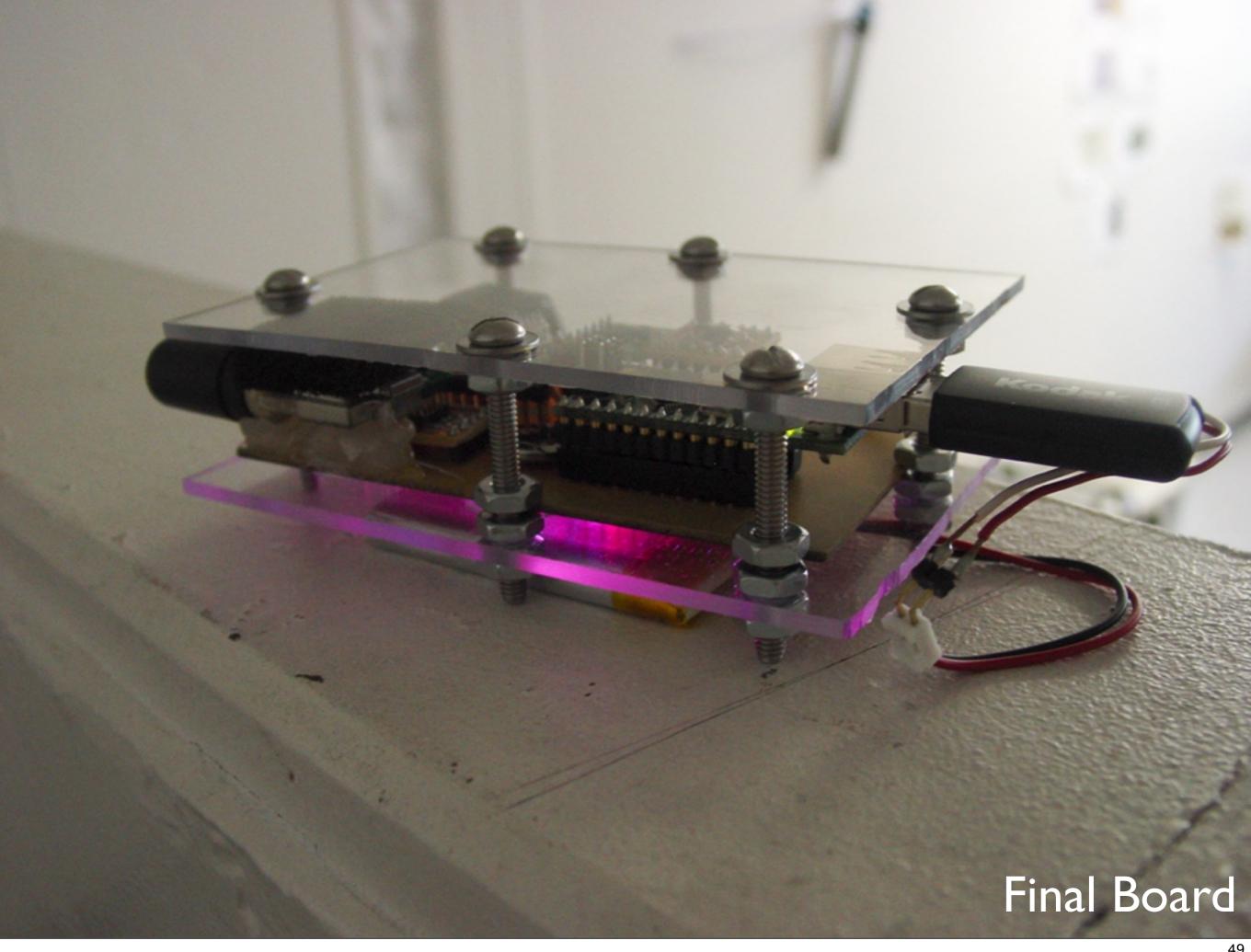


Layout

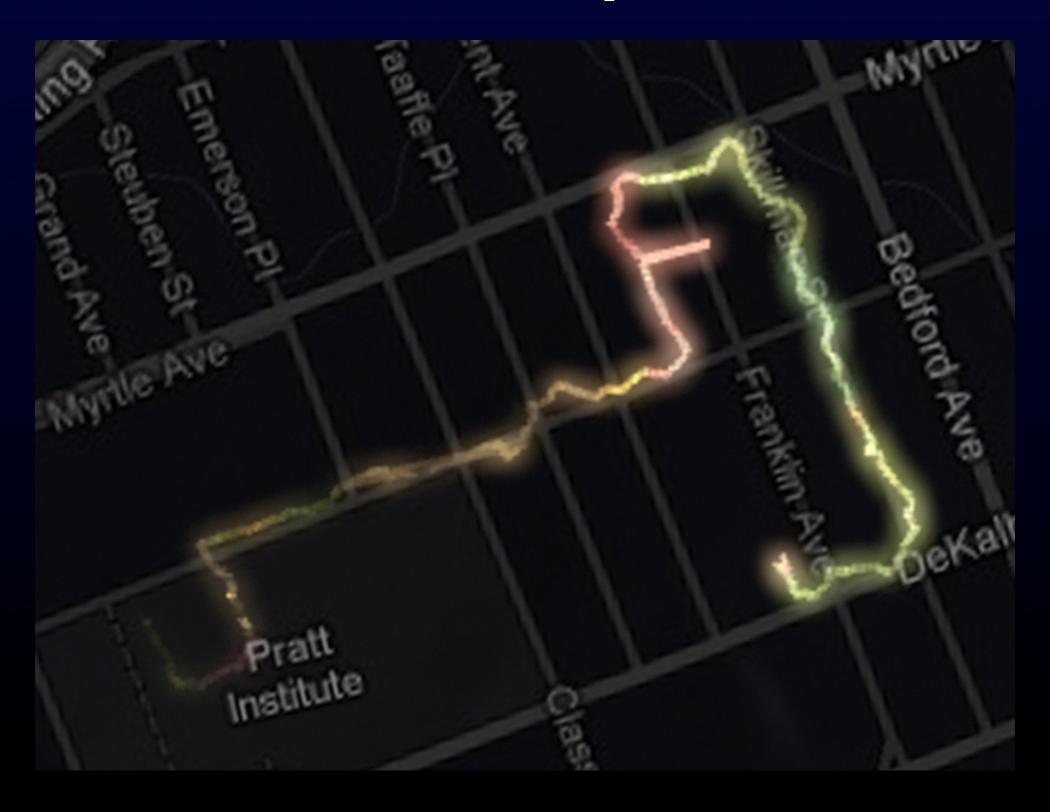


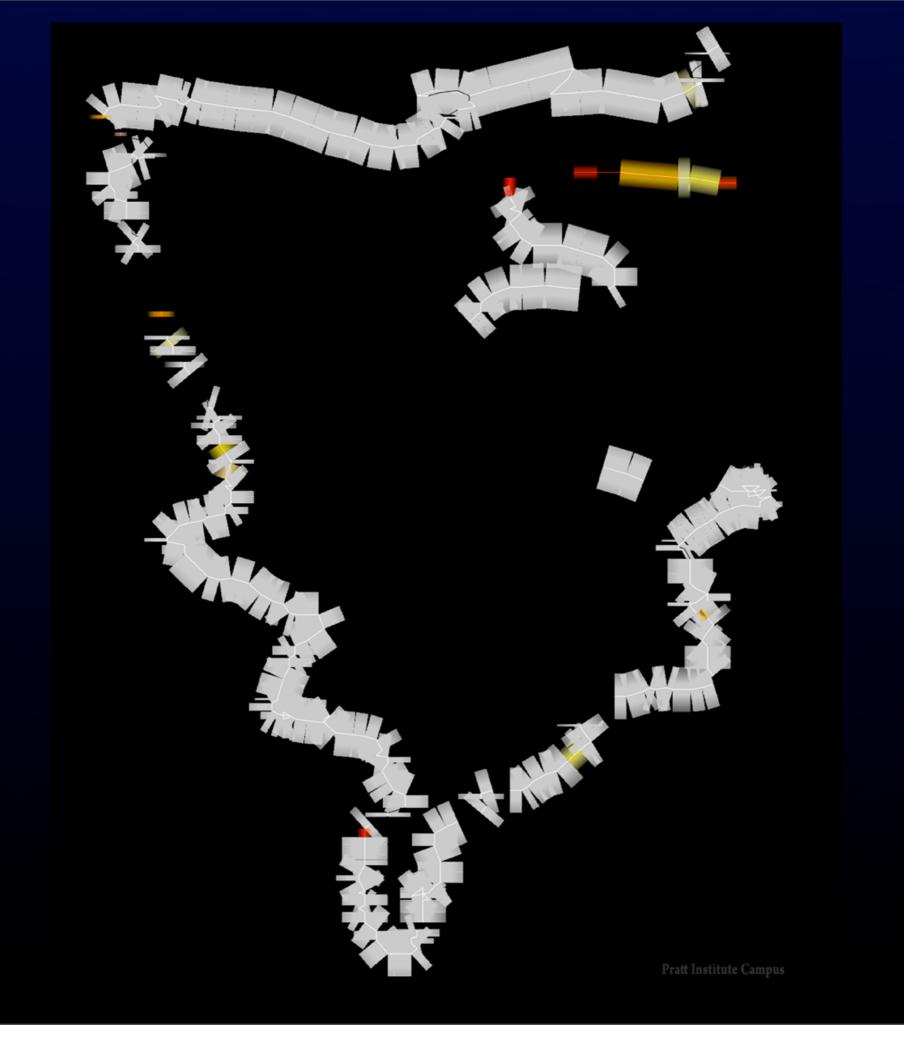


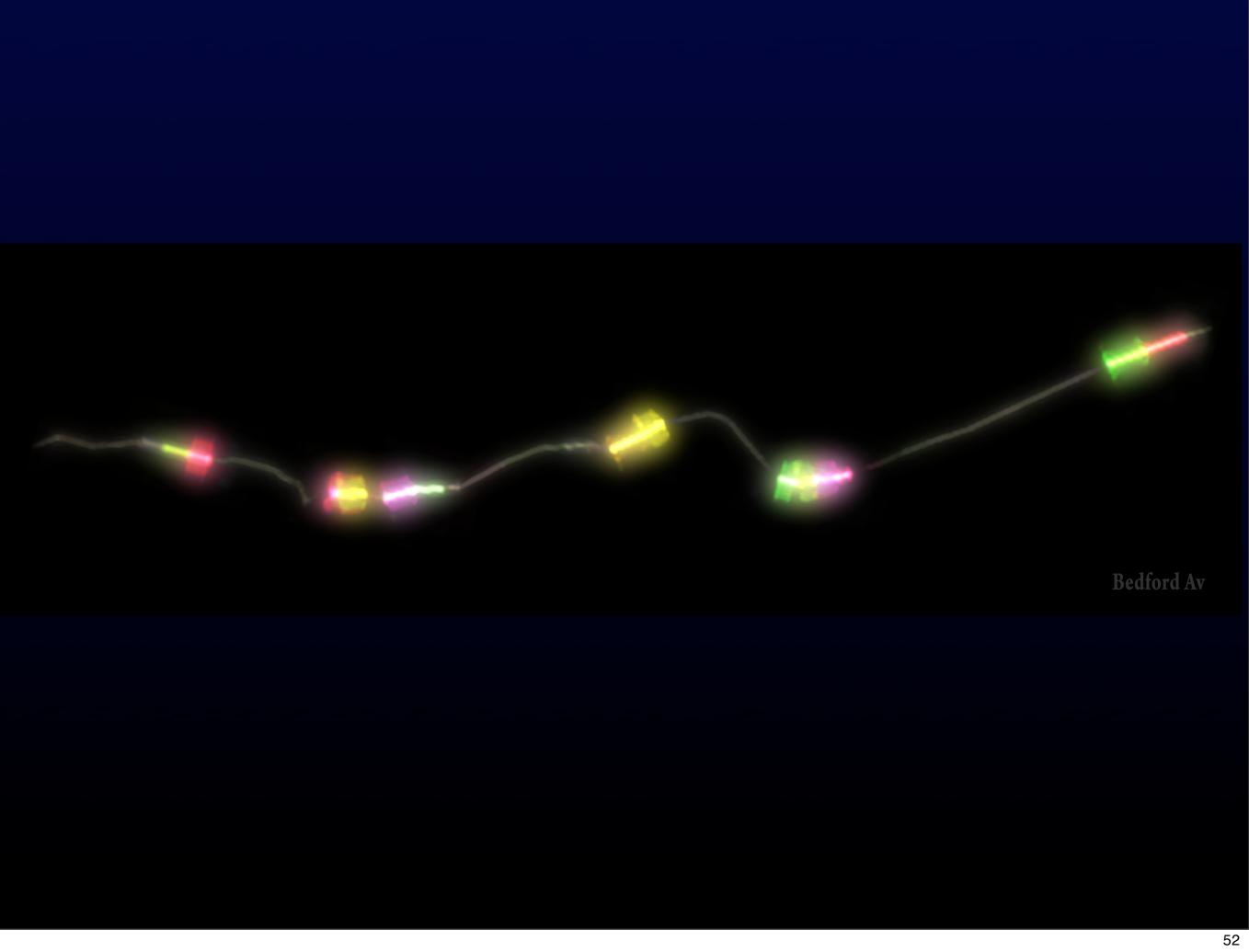
Etching

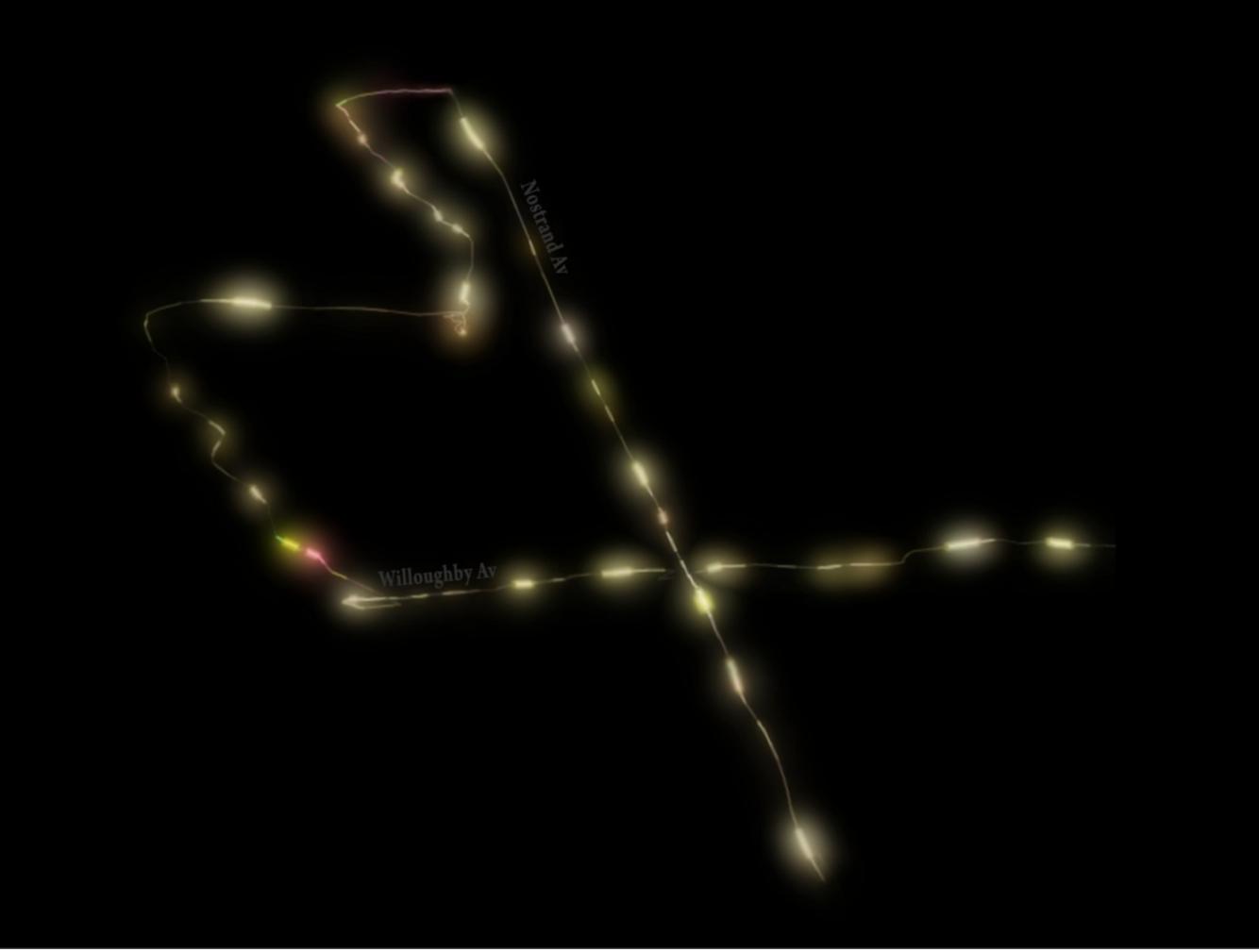


The Maps









Recycled Materials and Sustainable Transportation

All electronics are ROHS compliant!





Open Sourced

All electronics will be posted for free use and modification—much like the Arduino!

