How should the next bus stop be?
adaptable
sensing
responsive
interactive
...a bus stop like an i-phone...
TOUCH YOUR DESIRED DESTINATION

NEXT BUS APPROACHING

<table>
<thead>
<tr>
<th>Bus</th>
<th>Destination</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>BRONZETTI 02</td>
<td>2 min</td>
</tr>
<tr>
<td>32</td>
<td>BRONZETTI 02</td>
<td>5 min</td>
</tr>
<tr>
<td>18</td>
<td>BRONZETTI 02</td>
<td>14 min</td>
</tr>
</tbody>
</table>

DAL 13 MARZO A PALAZZO STROZZI LA MOSTRA SU GALILEO - TUTTI I VANTAGGI PERI CLIENTI ATAF

SCIOPERO VENER
THE DUOMO

Santa Maria del Fiore (also known simply as the Duomo) is the cathedral of Florence noted for its distinctive dome. Its name ("Saint Mary of the Flower") refers to the lily, the symbol of Florence. The impressive Gothic cathedral complex includes the Duomo, the famous baptistery and a campanile.

It was designed by Arnolfo di Cambio in 1294 to be the largest Roman Catholic church in the world (although the design was later reduced in size), with the first stone being laid on September 8, 1296.

It was not until 1355 that work resumed on the cathedral itself under a series of architects, including Francesco Talenti, Alberto Arnoldi, Giovanni d'Ambrogio, Giovanni di Lapo Ghini, Neri di Fioravante and Orcagna. The nave was finished by 1380,
**FOR SALE**

**REYNOLDS SDV6 Deep Dish Full Carbon Clincher Wheels - $1400!!**
Brand new, still in the box, never ridden!
Wheels retail for $2600. Selling for only $1400!!

**BOLD FOR TRADE... - $375**
I would like to trade my bold for a phone such as the iphone or others similar. Contact me with options and details.

**300 NEW PAPERBACK CHILDRENS BOOKS - $75**
I have approx 300-400 paperback childrens books that are brand new and need to sell them in one lot. They include: Sudoku 2, OTC, Madagascar, All Because of a Cup of Coffee, and others. There are at least 150 Sudoku 2 books which sell for 2.99 each. Please email me if interested. Thanks

**SPECIALIZED EPIC CARBON ROAD BIKE - $350**
This is an older bike but is in good shape.

**ESSENTIALS OF PSYCHOLOGY - $15**
Good condition. I can meet you in the northwest/midwest area.

**HUGH WEEKEND SALE (W. OF DECATOR SQUARE)**
SoRare collectsibles shop just west of Decatur Square is having a huge discount sale this weekend to make room for new collectibles. Items include: stained glass, yard art, lots of wrought iron, cement statues, fountains, lamps, loads of antiques and lots of really unique items for the home inside and out. A must!

**BASKETBALL GOAL FOR FREE!!!**
Come and get it!
This is an adjustable IN GROUND basketball goal. Its not portable, but once where you have to dig a hole put the post in the ground and either cement it or fill in with dirt.

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Come and get it!
This is an adjustable IN GROUND basketball goal. Its not portable, but where you have to dig a hole put the post in the ground and either cement it or fill in with dirt.
Nel mezzo del cammin di nostra vita
mi ritrovarì per una selva oscura
ché la dritta via era smarrita
USER EXPERIENCE

- **Fountain (Interactive)**: People interact with water, creating a more responsive environment.

- **Water Nebulizer**: Water installation for people to have fun while waiting for the bus.

- **Lighting Effect**: Special lighting effect for better identification and a better street view.

- **Aromatherapy**: Use aromatherapy to give those using the bus a better experience and mood.

- **Music Broadcast**: Use music to give those using the bus a better experience and mood.
SOCIAL NETWORK

Electronic devices such as cell phones or tags could make the system recognize the people coming by.

WIFI and Bluetooth device that help people to get information from the bus stop and communicate with the people nearby.

On line social network could be connected with the bus stop to bring about more face to face meeting in physical space.

Tap planning map and other interactive functions such as digital graffiti and community announcements.
ADDITIONAL APPLICATIONS

Ticket Vending
Pay the ticket online, take a picture and show it to the bus driver.

Product Vending
Buy some snacks or beverage from the dispenser in the bus stop.

Waste Disposal
The bus stop could have recycling system to help the residents.

Bike Sharing
Bike sharing system could be put into the bus shelter or use the screen to manage.

Air Purifier
Air purifier could be integrated in to give people fresher air when waiting.
DISPLAY TECHNOLOGY

**E-ink Display**

- Electronic paper display
- Bright
- High Contrast
- Full viewing angle
- Sunlight readable
- Ultra low power
- Thin
- Lightweight
- Shatterproof
- Flexible

EPDs are a technology that carries a charge enabling it to be updated through electronics. It is a reflective technology which requires no front or backlight, is viewable under a wide range of lighting conditions. Including direct sunlight, and requires no power to maintain an image.

**Producers**

- E-Ink Corporation
  - USA
- Magink display
  - UK

**DISPLAY with E-ink**
Energy generator (energy independency)
Semi-transparent (See-through)
A combination of sustainable and aesthetic value

PRODUCERS
UNI-SOLAR PRODUCTION
Rainbow Solar (RSi)
XCE International LLC
SOLARnext

RSi Unveils
SOLARnext
Florence Bus Stop Project
bus pole

SENSEable City Lab:...::
The city of Florence and ATAF Spa have partnered with MIT’s SENSEable City Lab to design a new system of interactive bus shelters and bus poles. The Lab’s design incorporates several types of digital technologies in order to offer new services to the public, allow for cost-effective manufacturing, and enable the generation of advertising revenue.

PARAMETRIC DESIGN
A parametric design model determines a unique design for each stop providing optimal sheltering and maximum exposition of the photovoltaic surfaces to the sun. Bus riders can plan their trip on an interactive map, exchange community relevant information on a digital message board, surf the web, and use the media on the bus shelter as an interface to their mobile devices. Unlike the mass-produced bus poles commonly seen in cities today, the Adaptable Bus Pole is designed to fit optimally the physical characteristics of the location in which it is installed. Because of the variation in site conditions each pole looks slightly different from another. Simple materials like shiny steel, extra clear glass and gray stone, together with an elegant shape and a sharp design let the pole fit into the different settings that an historical city like Florence offers.

INFORMATION DESIGN
A smart information design system permits to understand from distance bus information and waiting times. Screens will display the number of the buses and a lighting frame blinking with different intensity and modalities communicates immediately if a bus is approaching.

INTERACTIVE TRIP PLANNING MAP
Users can place a finger on their desired destination on a touch-sensitive map. The bus stop will show the shortest bus-travel path from where they are. Using information from a GPS tracking system, it will also show where the relevant buses are positioned in real-time and when they are expected to arrive at their desired destination. Users can beam this itinerary to their mobile devices using a Bluetooth link, or request an SMS notification when the bus is about to arrive.

COMMUNITY MESSAGE BOARD
Riders and passers-by can post ads and community announcements to a moderated bulletin board placed on the bus stop, enhancing the functionality of the bus shelter as a public place. Ad information can be uploaded by drawing with the fingers on the touch-sensitive surface or by sending a video, image, or text message from a mobile device. The bus stops then becomes a place to gather and exchange community relevant information.

BROADER NETWORK OF DIGITALLY AUGMENTED STREET FURNITURE
The high density of bus stops in a city will allow mobile device to use triangulation algorithms to calculate their location to a high level of accuracy. This, in combination with the available Internet connection, will allow users to receive enhanced location based services through their mobile devices. This option has been limited so far by the accuracy of current positioning technologies within an urban environment.
wi-fi and bluetooth antenna

semi transparent photovoltaic technology

advertisement on screens on the back

information design
bus number
waiting time

interactive touch-screen

base finished with gray stone
cpu
batteries
PARAMETRIC DESIGN
Florence Bus Stop Project
bus shelter

SENSEable City Lab:...: