

Aura, a concept vehicle

Leuven, Belgium

Summer Internship, Olin Year 2

I spent my time in Leuven working with European nanotechnology research institute, imec.

Aim: To **design a concept car** from scratch, with a futuristic aesthetic and high-tech engineering design.

The vehicle **targets Europeans that commute** in the cities. It is to bridge the gap between the bicycle-commute that is commonplace and the unnecessary car commute that is inefficient. It is a push for renewable energy & sustainability.

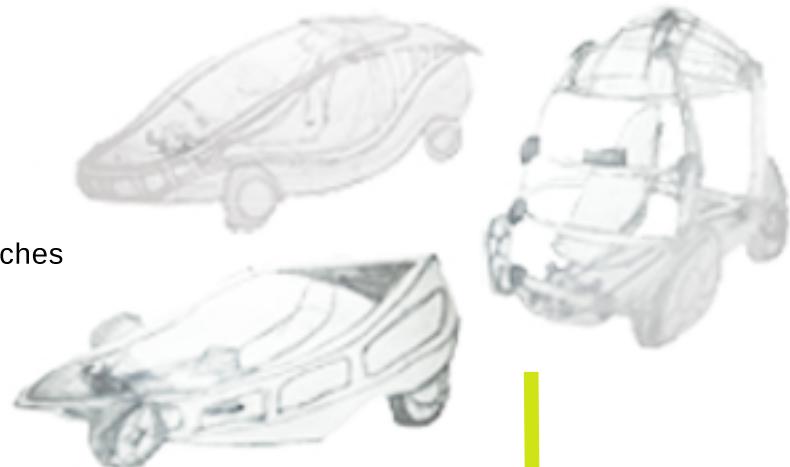
Design: **Aura** is a **3-wheeled pedal-powered electric vehicle** that aim to preserve the exhilaration of a bicycle ride while integrating the comfort of a car, as requested by our users. It allows the rider to pedal while using electric-motor assist when required. **Aura** is different because of its sustainable 'cradle to cradle' manufacturing cycle and nature-friendly transport.

Aura wants to be more than just a vehicle. It is an accessory, a partner in connectivity with the community via the smartphone or tablet. The high-tech integration allows for the modern-day user to embrace the power of the social network.

We **designed the engineering:** in-hub motor control, its mechanics, and integration with the pedal-power. We **laid out the controls system** that allows the vehicle to decide when to provide the electric-assist and also integrates the user's needs via the smartphone. And we **sketched the exteriors and interiors design** of the car [as shown].

[Engineering team started in Summer 2012.]

Initial Sketches



Final Design & Dimensions of Aura

