

2009 Design Challenge – Youthmobile 2030 Entry Summaries

GM Car Hero

Are you gaming or are you driving?

Yes. The OnStar Car Hero is a vehicle and a game... it turns driving into gaming and challenges your skills against the car's autonomous system. Imagine a gaming experience which can actually teach a beginner to drive or challenge the experienced... whether you're a lowbie or a legend, Car Hero takes "getting there" to a whole new level.

Getting started is easy. Just enter your destination into the navi app on your smart phone and the car takes care of the rest. It lets you "play along" and try to match the skill level of the system. As you get better, the Car Hero "unlocks" vehicle control to the point where the autonomous system is overridden and you're in complete control.

As the Car Hero gamer demonstrates skill and mastery, the vehicle's "transmorphable" architecture turns up the intensity by creating an increasingly challenging driving experience. Car Hero's configuration rewards your skills by gradually changing from a four, to three, to the ultimate challenge: a single wheeled vehicle. Your talent determines how outrageous it gets and where it lets you go.

Car Hero also features P2P apps like "Friends Drive" where anyone can come along for a digital joyride, think of it as Twitter with wheels. For those bored and stuck in yet another LA Sigalert, "Fantasy Drive" gives you access to insane environments such as running with the bulls in Pamplona or taking on Ken Block in a drift contest... down a black diamond at Mammoth!

The experience is up to you. Only question is... Are you up for it?

GM Advanced Design, Los Angeles

Frank Saucedo, Director

Team: Thamer Hannon, Shawn Moghadam, Julius Bernardo, Jussi Timonen & Steve Anderson

Nissan V2G [UNLMTD]

In the years leading up to 2030, the electrification of the nation's highways leads to the creation of a new ultra-efficient, high speed network called the 'GRID'.

Nissan's 'ON-GRID' compliant vehicle for the year 2030 is the V2G (Vehicle-to-Grid). Wildly popular with consumers thanks to its low cost, dynamic styling and quality construction, the V2G is the best selling electric vehicle of its time. Nissan's comprehensive and affordable range of GRID access plans (similar to mobile phone plans) have also helped to make V2G the market leader.

In the spirit of LA's legendary automotive counter-culture, creative young minds see untapped potential in the V2G. Taking advantage of the simple and user friendly EV architecture, they quickly hack the V2G, take it 'OFF-GRID' and begin to explore the virtually endless opportunities of this newly created vehicle segment.

The V2G [UNLMTD] is born.

Team:

Stephen Money Penny – designer

Ryan Campbell – designer

Satoru Hasegawa – designer

Hanu Yoo – designer

Randy Rodriguez – designer

Ann Ngo – research

Ray Devers – color & materials

Derek Millsap – digital designer

Matt Wilson – digital designer

James Cronin – visualization

Don Sondys – visualization

Audi eSpira/eOra

I. Premise: 2030 - Future of the driving environment

Future generations will be born into a comprehensive digital environment. Enchanted by technology, drivers will become accustomed to the convenience of automation in their vehicles. The next generation of vehicles will provide autonomy far beyond today's vision. Although autonomous driving will provide safety, efficiency, and convenience, it can also lead to a detached and sterile driving experience. Audi, true to its "Vorsprung durch Technik" philosophy, showcases two vehicles that are truly engaging in addition to the aforementioned advancement.

Remember the excitement of your first time behind the wheel? Here are two examples of capturing that kind of youthful experience.

II. Vehicle concepts: The dream, and living the dream

1. **Audi eSpira:** The Aspiration – An ultimate technological tour-de-force whose image will stir every kid's imagination. Audi in its most uncompromised form, the eSpira functions as an extension of your body and its senses. Using next generation vehicle control logic, the eSpira takes even the smallest body movements and gestures of the driver into consideration to provide an unsurpassed command of the drive. The most direct, fluid form of vehicle control is only thoughts away.

2. **Audi eOra:** The Essence – An accessible representation of freedom and coming of age for the young (and young at heart). A "sport" vehicle that shares the same control logic as the eSpira. Extremely dynamic and efficient, the Audi eOra has a small footprint and unmatched agility. Like a downhill skier, the eOra carves the roadscape with precision. By constantly adapting to the driver's movements and intentions, the eOra and its driver move harmoniously as one with unrivaled dexterity.

These vehicles encompass the core Audi experience: progressive, imaginative and visceral.

Authentically youthful driving experiences.

Produced by:

Design Center California

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Honda Helix

What is individuality? What does it mean to be exclusively unique? In an increasing world of global commercial goods, is it really possible to be one of a kind? Emerging technologies, such as genetic integration and advanced adaptive polymers, will shatter the current paradigm of what is now considered "personally" unique.

Advanced adaptive polymers, capable of shifting shape, color or even material properties, when coupled with the user's genetic code (DNA), will allow a vehicle to not just function as transportation, but rather be an extension of the user, evolving in parallel with the user throughout his or her life. Ownership will become more about the fulfillment for the driver through time and less about fulfillment of a product's lifespan. The longer the vehicle is with its owner, the more time it has to evolve to meet the user's needs, and ultimately form a unique singular bond between both human and machine DNA.

Like DNA, the Helix has 3 major, distinct conformations: A, B and Z. "A" is short and wide for cities that have very tight and intertwining road systems, where agility and speed allow a vehicle to more easily navigate chaotic traffic patterns. "B" is long and low for the sprawling cities of the world, where large distances allow for high speed travel. "Z" is tall and thin for congested cities of the world, where seating occupants vertically on two levels has the most volume per minimum footprint of any vehicle.

By using flexible and transforming multi-functioning parts, the Helix adapts and reacts to specific environments and traffic patterns by changing the orientation of its main capsule for optimal environmental operation and user functionality. Bio-receptors allow the vehicle to micro-adjust even further to meet the exact demands of the user and the environment. The direction of movement stays constant no matter what conformation the vehicle assumes. The Honda Helix is a vehicle capable of adapting, evolving and conforming to user needs anywhere in the world. Using insight gained from the human genome, biotechnology and environmental forecasting, the Honda Helix will actively and dynamically conform to the user's needs in environments ranging from the congested skies of Japan to the wide open roads of America.

Team:

Iliyah Bridan

Michael Baytion

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Mazda Souga

The year is 2030 in the city of Los Angeles and 18 year old Max is off to pick up his new Mazda. Los Angeles has seen a new movement of young entrepreneurs (ages 16-23) and has become a hub for creating personal brands and products on desktop 3D manufacturing software. Mazda has taken notice and created VMazda - a virtual reality website that acts as a design playground for young people, allowing them to experiment, build and share their automotive dreams in a virtual world at no cost.

With the help of a virtual design mentor, Max's design is rapidly manufactured at one of Mazda's sustainable Direct Digital Manufacturing plants. Max pays a low price of \$2000 for the physical car, while paying a monthly bill for the energy his electric car uses (similar to the cell phone business model).

Max's new car is a minimal, lightweight sports coupe with experimental shapes, ornate detailing and a dramatically proportioned exterior. Most digital communication and information devices are now integrated into fashion apparel, eliminating the need to include these systems into Max's vehicle. As a result, his vehicle controls are purely driver focused.

Team:

Derek Jenkins - Design Director

Carlos Salaff - Designer

Jacques Flynn - Designer

Greg Lee - Alias Modeler

Tim Brown - Alias Modeler

Toyota LINK

With the college enrollment rate at an estimated 81%, the youth of 2030 are one of the most intelligent and proactive generations yet. The Toyota LINK is an affordable, customizable mass transit vehicle for students with high social networking demands and continuously evolving preferences. With little-to-no disposable income, these students are now able to once again enjoy their commute in a world where transportation has become more expensive and less appealing.

Students can meet at various HUBs to pick up their LINKs. Once occupied, the LINK seamlessly links onto a transportation social network, allowing connections with other drivers to share the commute, trade music or compare class schedules. Made with Toyota's newly patented electro-fiber technology, "LINK SKINZ" can be downloaded to digitally transform the vehicle's shape into a personalized exterior design. In place of traditional wheels, the LINK drives on SPHERES

made of an electro-conductive material that converts friction into energy, recharging the batteries and satisfying the driver's high standards of a maximized eco-friendly vehicle.

CALTY DESIGN RESEARCH

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