



MICHAEL ARAYA // GRAPHIC DESIGN AND MULTIMEDIA

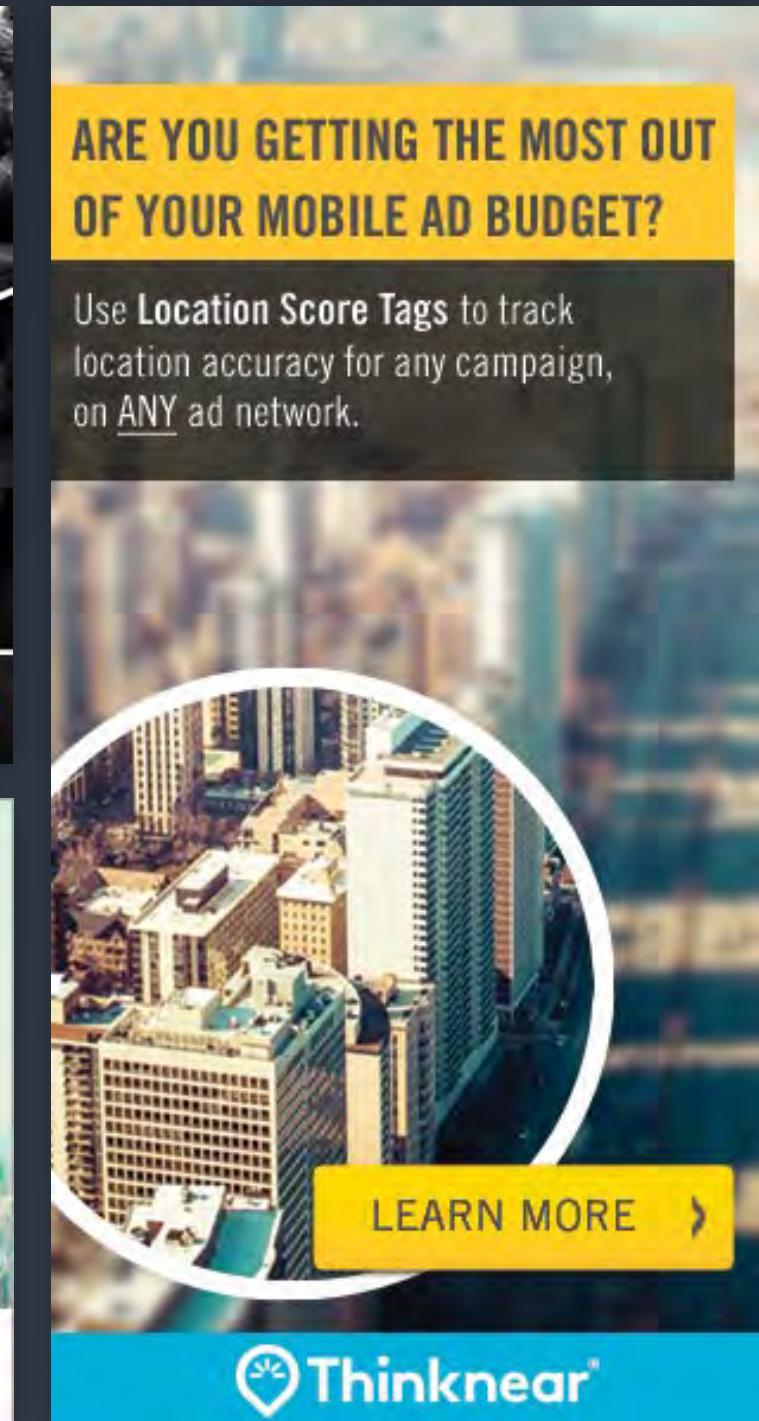
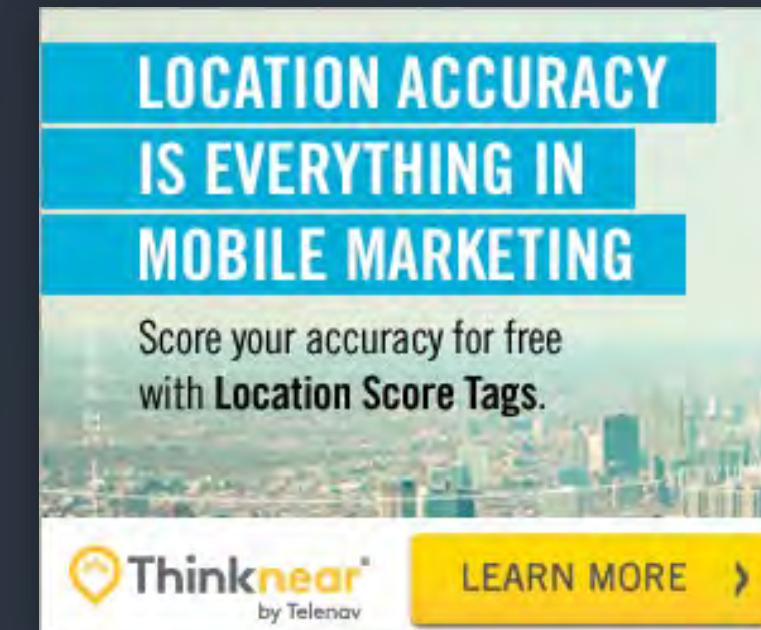
DIGITAL AND PRINT DESIGN SHOWCASE

WEB GRAPHICS

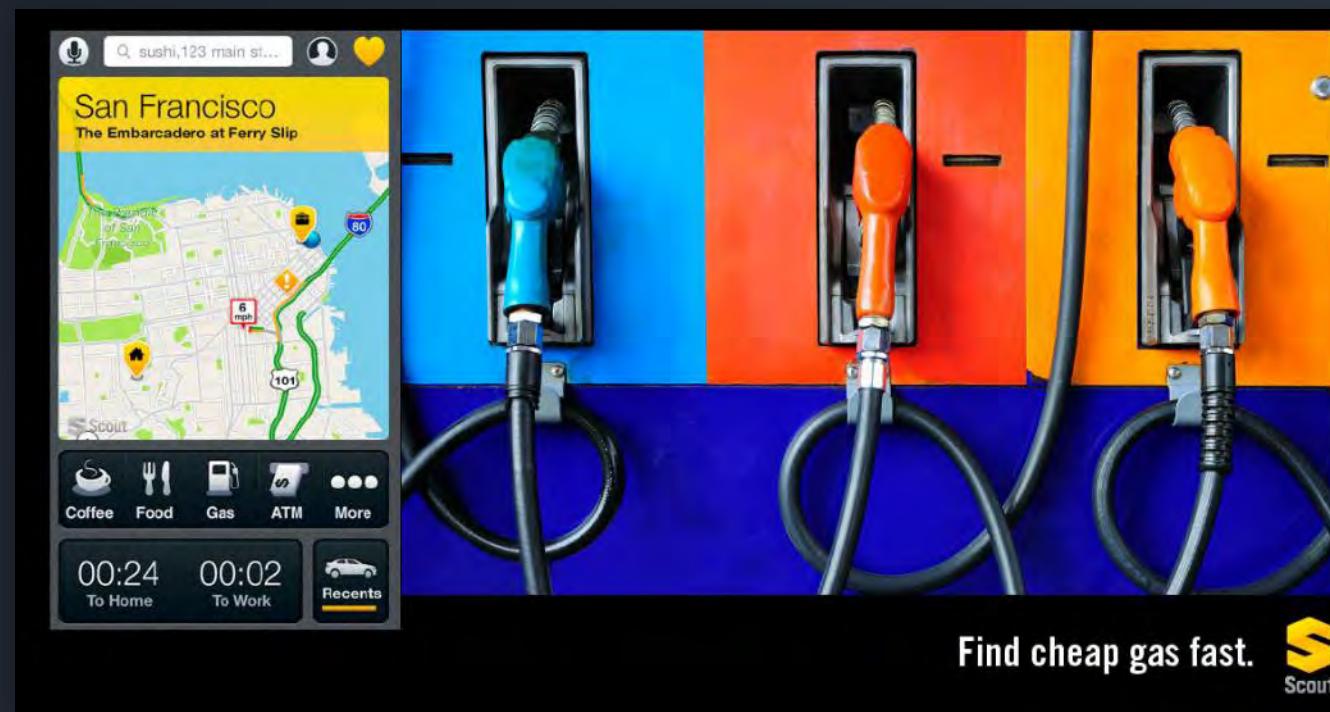
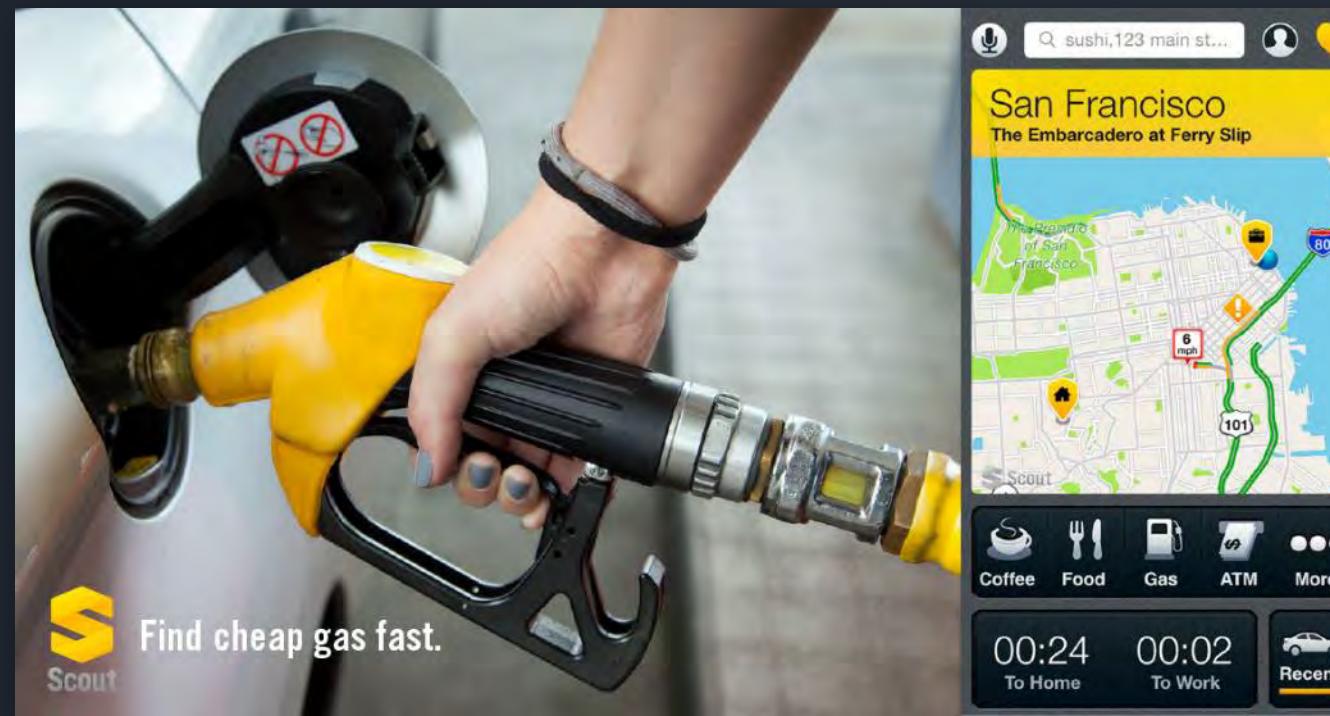
Social Graphics and Advertising

TELENAV

A collection of TEVENAV web graphics for social media streams, announcement emails and advertising banners. Used primarily for new feature rollouts and directing traffic into app store platforms.



Photoshop, Illustrator, InDesign, Flash, Premiere, After Effects, PowerPoint, Photography, Lightroom, Stock Images



TELENAV

EXPERIENCE THE FUTURE OF NAVIGATION

THE FUTURE IS HERE NOW.
JOIN TELENAV FOR A TECHNICAL EXHIBITION TO EXPERIENCE IT FIRST HAND.

Come discover the latest and upcoming innovations in automotive navigation. See how Telenav Automotive solutions work seamlessly inside and outside of the vehicle to deliver a highly personalized and connected experience.

**Scout for
Ford SYNC® AppLink™**

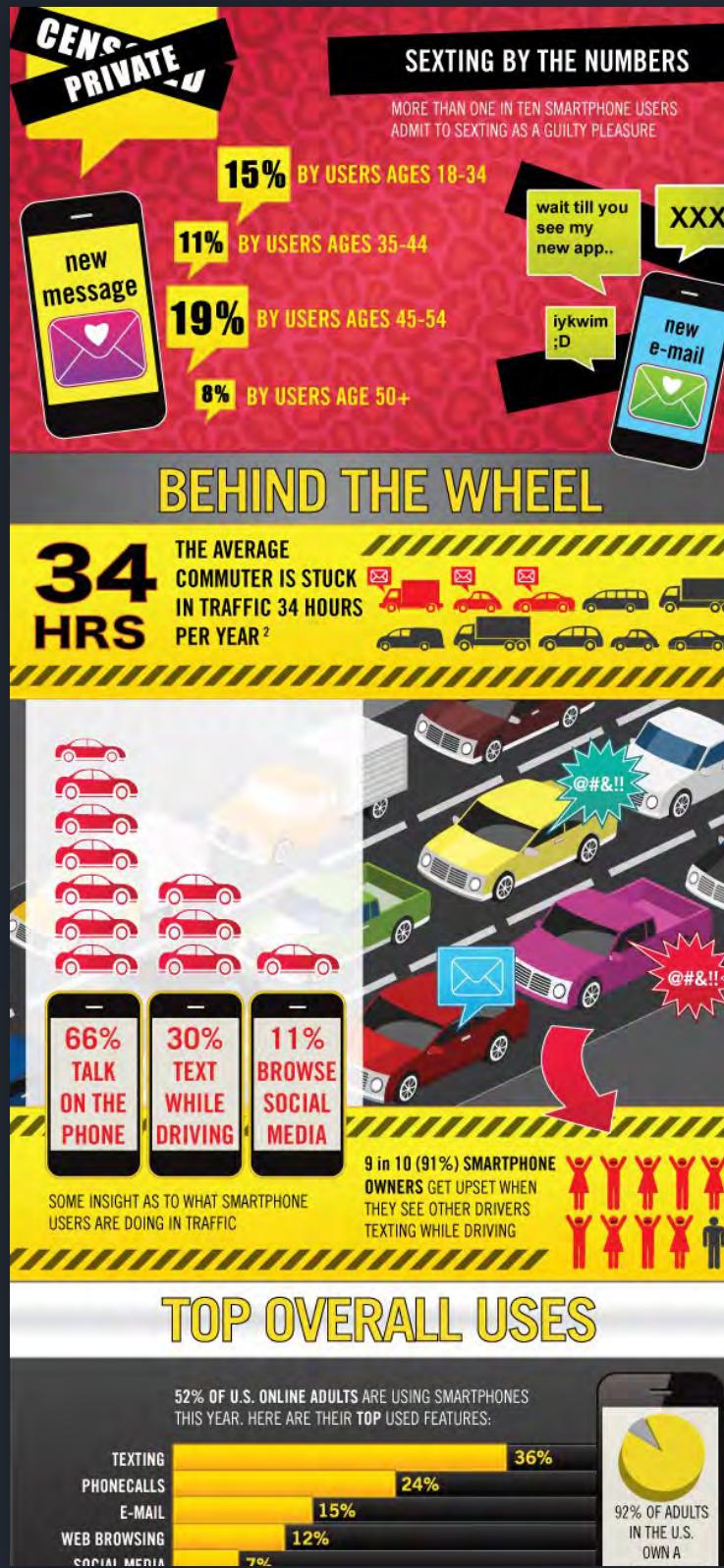
**Personalized Connected
Navigation**

**The Next Generation
of Navigation**

WHERE: Building #5, Lobby Conference Room #1

WHEN: February 22nd 9:30am-1pm

FOR MORE INFORMATION: automotive@telenav.com



MAKE THIS YEAR'S PLANS YOUR MOST MEMORABLE

Discover and share your 2013 plans with Scout on your computer or phone

FIND LOCAL EVENTS ON SCOUT.ME

http://m.scout.me/

Scout

San Francisco

Discover Drive

EVENTS FOOD FAMILY OUTDOORS

Scout

Things to Do in San Francisco Bay, CA

Events Food Family Culture Outdoors Sports

Most Popular Music Kids Feed Sports Museums & Art Festivals

Cracker At The Independent Yoshi's San Francisco

Maceo Parker's Funky New Year's Party At Yoshi's San Francisco Yoshi's San Francisco

Zed's Dead The Warfield The Warfield

Steve Aoki Afterparty The Warfield The Warfield

Further With Phil Lesh And Bob Weir The Warfield The Warfield

Bill Graham Civic Auditorium Bill Graham Civic Auditorium

SCOUTING YOUR CITY JUST GOT EASIER AND FASTER

Discover and drive with Scout for Android

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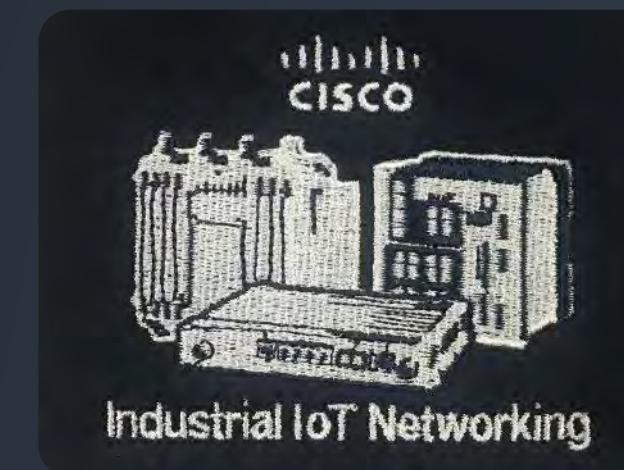
DIGITAL MEDIA

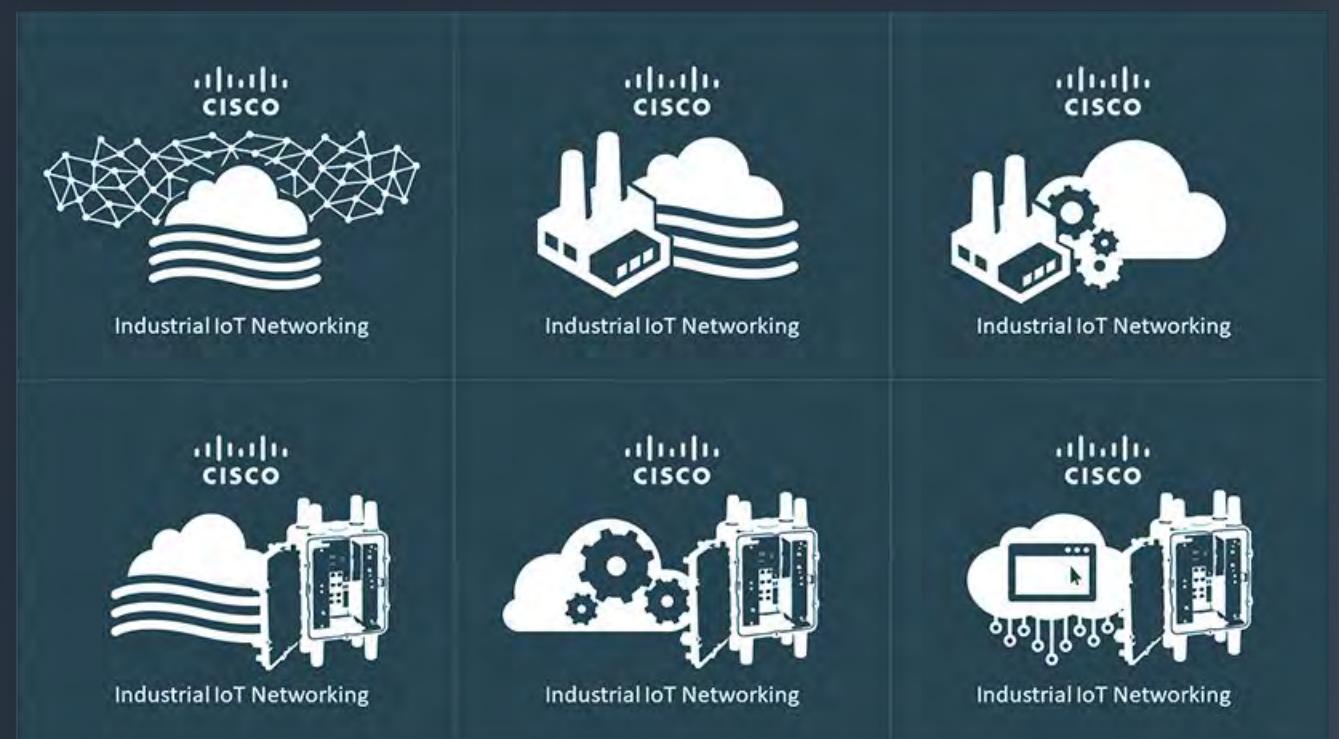
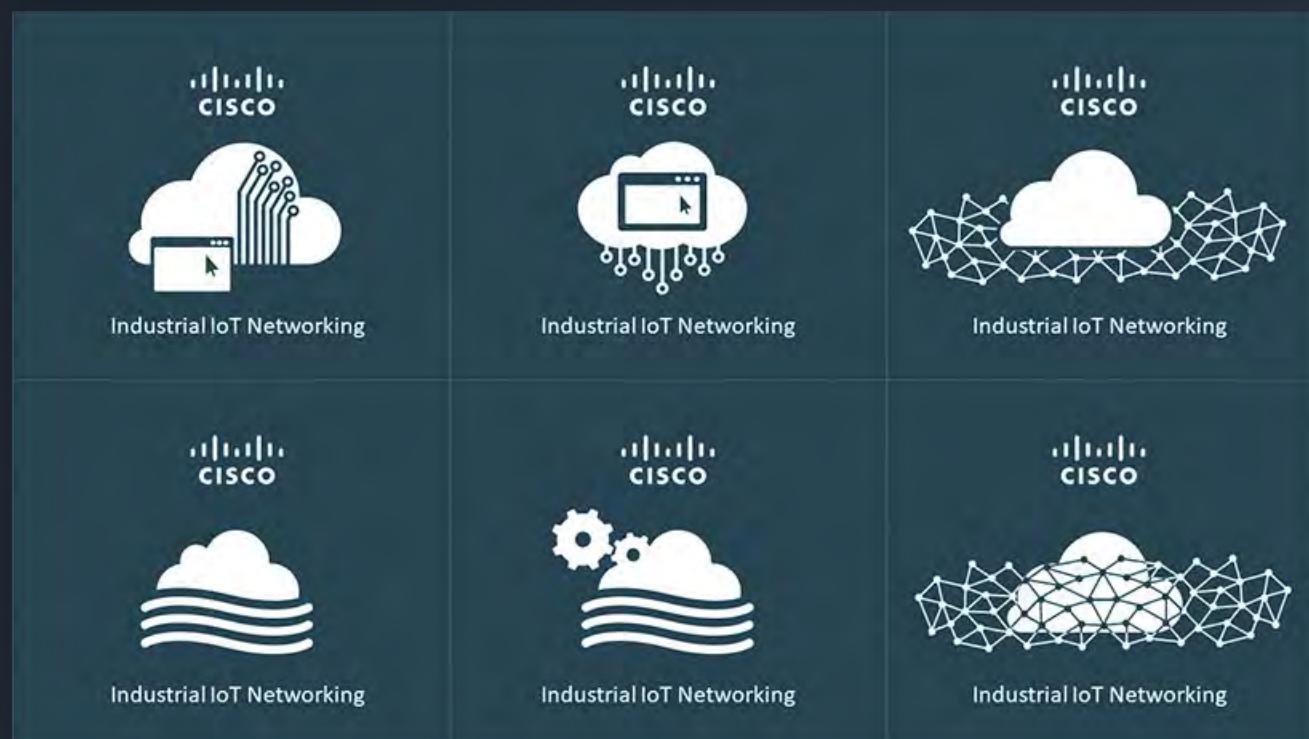
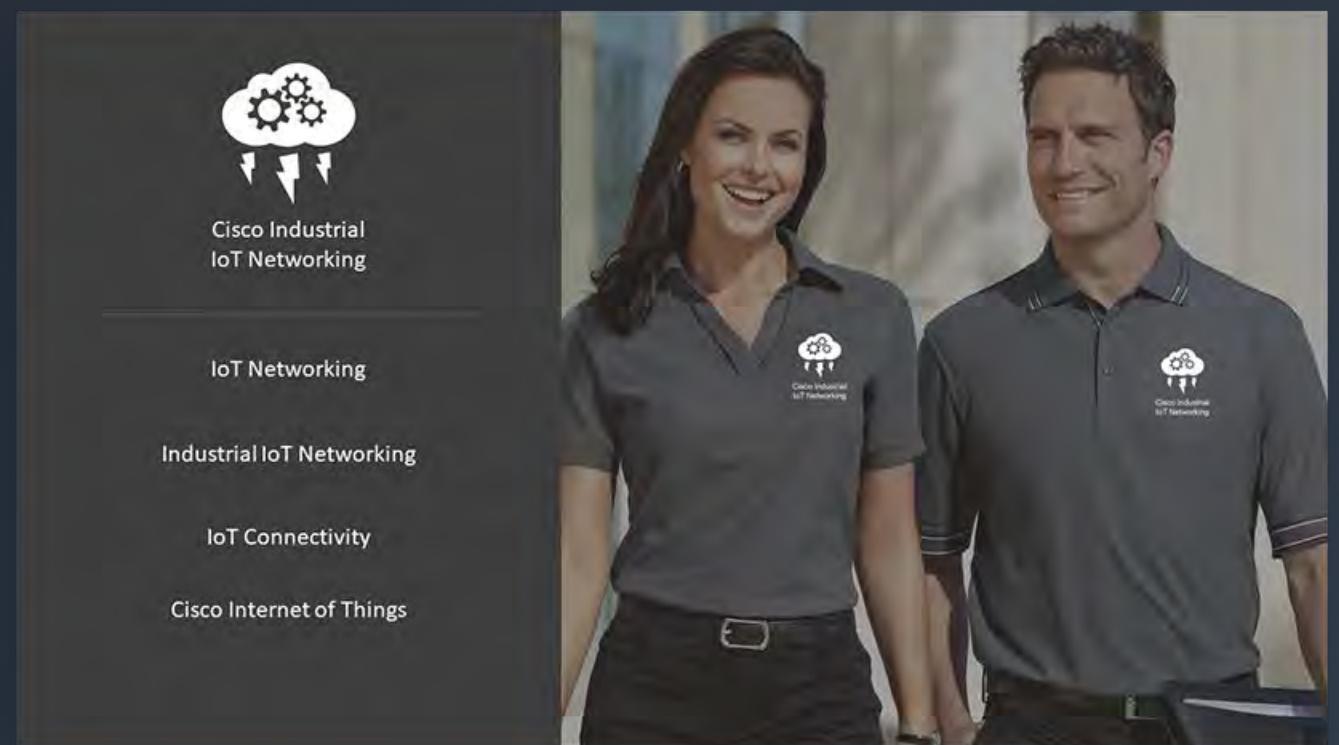
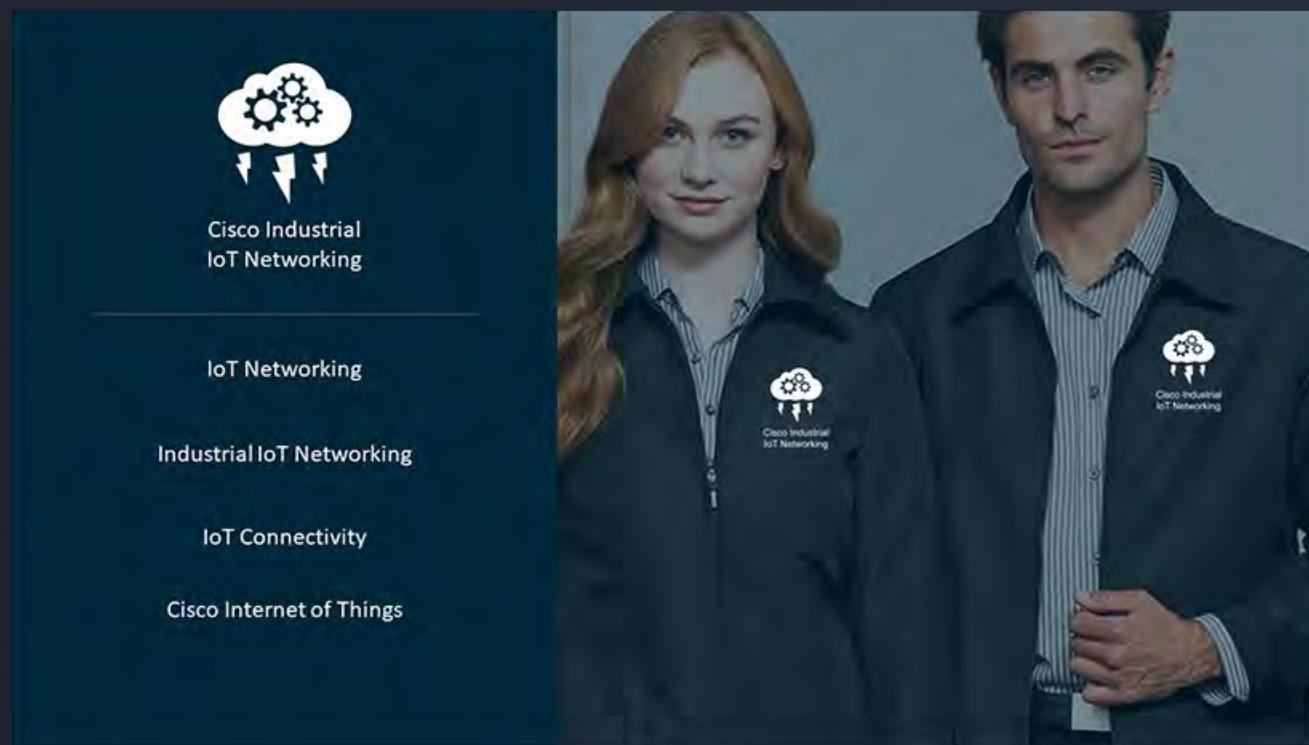
Industrial IOT Team Branding

CISCO Industrial IoT

Icons designed for the Industrial IOT team's embroidered event attire, branded graphics and giveaway prizes. Designed as PowerPoint images, social media graphics and print ready vectors.

Photoshop, Illustrator, InDesign, PowerPoint





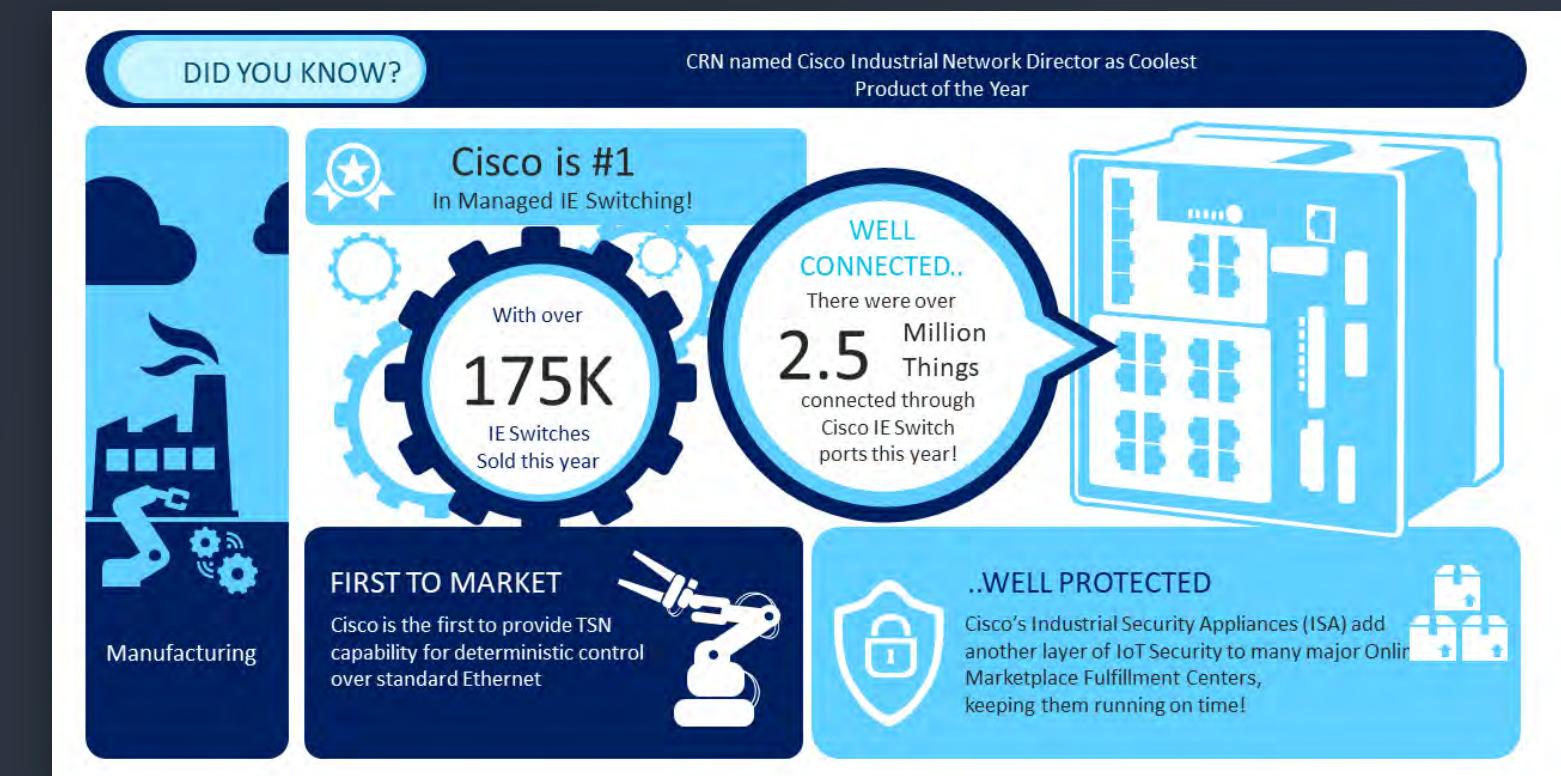
DIGITAL MEDIA

Industrial IOT Infographic Posters

CISCO Industrial IoT

Infographic posters showcasing the Cisco Industrial IOT product line and popular user applications, with fun facts and milestones. Designed as sharable PowerPoint slides, social media graphics and printable posters.

Photoshop, Illustrator, InDesign, PowerPoint



DID YOU KNOW?

The CGR is the toughest Cisco Industrial IoT Routers in the market - with a unique ruggedized enclosure rated at IP67, it can handle just about anything!

Utilities

Cisco Industrial Switches are currently implemented in Wind Farms, enabling Clean & Renewable Energy Solutions

This Year, Cisco Won the Biggest Utility Deal in France 250,000

Cisco IoT Routing Units will manage smart grids across France in a deal spanning the next 10 years!

The CGR line is expanding modularly with 128GB server cards and new 4G/LTE cards

The Toughest Switch is Getting Tougher!

There are now 4.5 Million Connected Smart Meters in Cisco's Field Area Network Solution

DID YOU KNOW?

Not only do Cisco Routers in Roadway Safety Solutions make faster, smarter, safer commutes, they also pave the way for Smart Cars and Automated Vehicle Technology!

EYE IN THE SKY

Cisco Embedded IoT Technology is in use above the battlefield, in highly sophisticated defense drones

Wi-Fi Connectivity On The Go!

Cisco IW3702 access points have been selected by Deutsche Bahn to provide passengers with quality Wi-Fi service during their high-speed and regional train journeys

Transportation

SAVING LIVES

The Cisco IR829 Industrial router means safer roads, smoother commutes and faster emergency service response - through connected roadside sensors, processing power, Dual LTE and Wireless capabilities!

Cisco's IR809

Routers aid the Tennessee Department of Transportation with faster roadside processing and traffic management

DID YOU KNOW?

The Cisco IW3702 was selected for Google's free Internet service at Indian railway stations. In Mumbai alone, 100,000 people made use of Google's services within a week of its debut!

Smart Cities

This year, Cisco connected 9000 Switching Units in Rajasthan, part of the Government of India's redevelopment plan to create Smart Cities!

Cisco IoT Networking Around Town

Smart Cities utilize Cisco Industrial IoT products to monitor and manage city lighting, public parking, city-wide Wi-Fi connectivity, sanitation, smart buildings, water & utilities, and public safety

WIRELESS IN SAN FRANCISCO

Overhead iconic Market Street in Downtown San Francisco, high-performance Cisco IW3702 access points have been deployed to provide maximum network capacity for Super Bowl 50 visitors and locals alike!

DID YOU KNOW?

LoRaWAN Solutions utilized in the 2017 French Tennis Open! From tracking foot traffic and attendance numbers in courts, to managing queues and providing customer satisfaction feedback.

Things

Cisco LoRaWAN has 240 Engagements Across 55 Countries and 50 POC projects

SAFE AND SOUND

From tracking herds of cattle and sheep at the farm, to adding sophisticated alarm systems to the horns of endangered rhinos in Africa, Cisco's LoRaWAN Solution can keep animals safer, smarter!

RUGGED CONNECTIVITY

Cisco's LoRaWAN Solution in Connected Mouse Traps let you know where and when they've caught a critter!

SAFE AND SOUND

From tracking herds of cattle and sheep at the farm, to adding sophisticated alarm systems to the horns of endangered rhinos in Africa, Cisco's LoRaWAN Solution can keep animals safer, smarter!

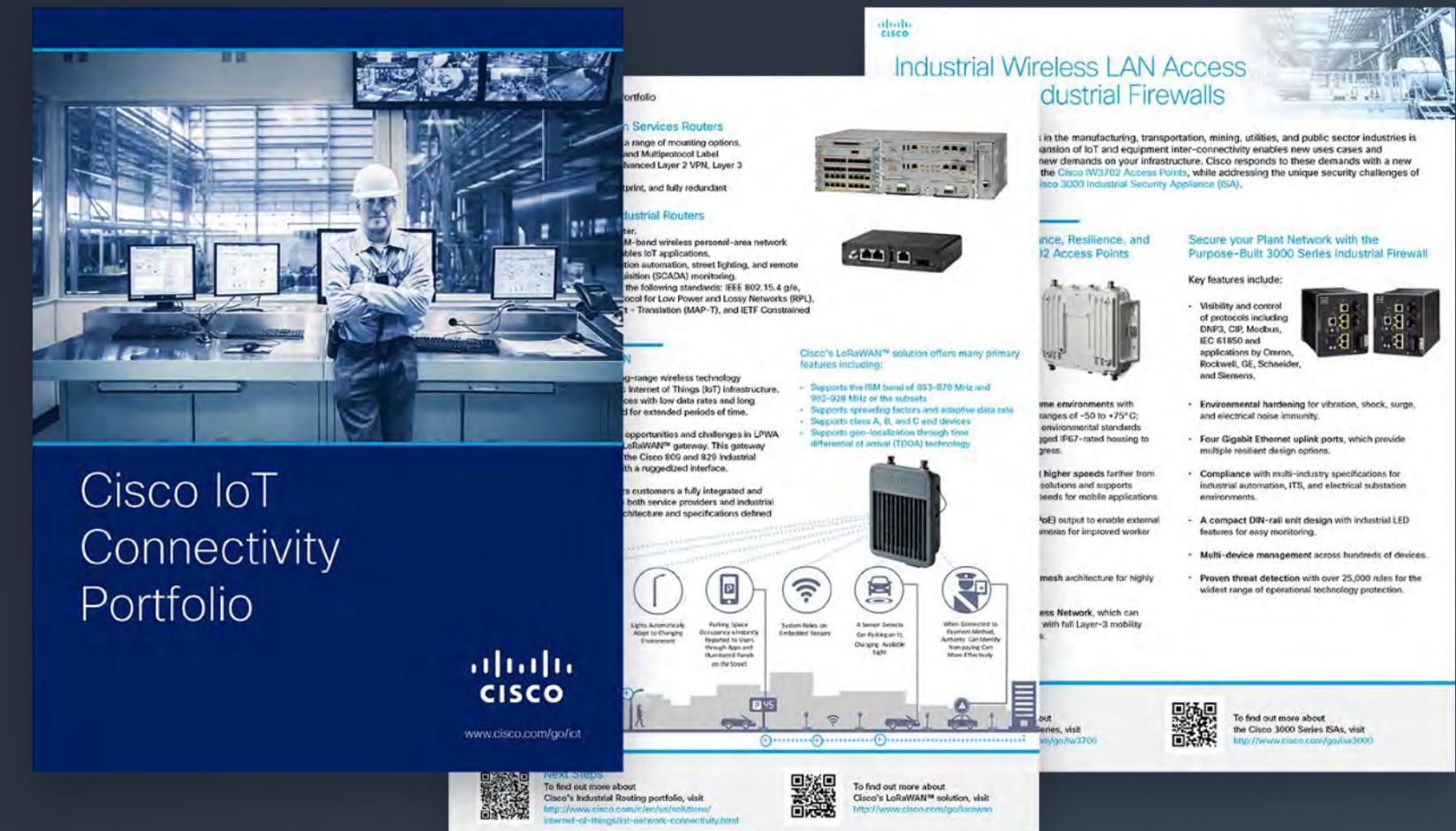
PRINT MATERIALS

CISCO IOT Connectivity Portfolio

CISCO Industrial IoT

An updated product catalogue of the product lines supported by the Industrial IoT group. Available for web and print format, used for promotional handouts and technical reference.

Perfect for use across sales and marketing teams, supplemental materials for conventions and industry events or for distribution online.



Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images

PRINT MATERIALS

Additive Manufacturing Solutions Printed Brochures

VELO3D

Informational PDF files for printed brochures and bifold whitepapers showcasing VELO3D technical capabilities, written by field experts.

Perfect supplemental information and marketing material for conventions and industry events or for distribution online.

Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images

VELO 3D

Innovator's Guide to Metal AM Part Selection

How to Select Parts for VELO^{3D} SupportFree Manufacturing

Brian Spink

VELO 3D

Gain Control of the Supply Chain

Leveraging Advances in 3D Printing Quality and Design for MRO

For the MRO industry, getting parts can be hard. And for every \$1,000 dollar part that you have on order, a multi million dollar asset sits unused costing over \$100,000 per day in lost revenue. Getting control of the supply chain can help get those planes back in the air. That creates value for your customers and in turn, more business for you.

VELO 3D

The Business Impact of a Support-Less Process for Metal Additive Manufacturing

by Todd Grimm

Support structure elimination is a component of Knust-Godwin's business growth plans. Corliss said, "It's a lower cost and faster throughput, that is key." He noted that racing often are not bench operations (hand working parts), rather they get the job done. Considering the cost of CNCs and the skill level of the operator for a metal AM part can be significant. Additionally, when considering job and do the work, the impact on delivery is substantial.

throughput is a key to our success because the more you get out the door, "Freeing up CNC operations from support removal activities creates more additional capital expenditures. And this fuels business expansion in both

throughput is critical to AM. Although speed is often positioned as a key benefit of AM, He said, "When we look at the price of the part, the majority of the cost is in the support structures. Any improvement in throughput helps offset that part cost. Therefore, if we are dedicated to building the part and not support structures, we have a more material is consumed as waste."

Support-free metal AM frees us up to use the geometry we'd like to use rather than being pushed into using a design that compromises the aerodynamics in order to make an AM-friendly part"

95%
of parts built with metal additive requires support structures

40 mm ID Manifold 500:1 Aspect Ratio Heat Exchanger

PRINT MATERIALS

Additive Manufacturing Solutions Partner Case Studies

VELO3D

Informational handouts and booklets showcasing an industry partner use cases and Velo3D solutions for problematic metal additive printed parts. Great for starting conversations which could lead to developing growth in target markets.

Perfect supplemental information and marketing material for conventions and industry events or for distribution online.

Photoshop, Illustrator, InDesign, Photography, Lightroom, Stock Images

Sierra Turbines Case Study:

VELO^{3D}

Sierra Turbines Drives Innovation for Microturbines

Manufacturing gas microturbines to be 40X more efficient, 10X more power density, and 50% lighter in weight

Sierra Turbines

Roger Smith is breaking the rules of manufacturing. The chief executive officer of San Jose, California-based **Sierra Turbines Inc.**, he's discarded the industry's long-held belief that additive manufacturing (AM) is limited to prototyping and low-volume work. In fact, Smith plans to additively manufacture 95% or more of his microturbine components even when he reaches large-scale production.

Smith doesn't care that he's discarding several other industry beliefs, among them the notion that overhauling microturbines every 40 to 50 hours is acceptable. Smith is unhappy with much of the small-engine status quo. A microturbine has historically been a simplified version of its full-size counterpart; cost restrictions have always prohibited manufacturing complex features that would give microturbines improved performance. With a little radical thinking and a healthy dose of advanced technology, he's prepared to change it.

Two 3D-printed turbine combustors that serve as the core of Sierra Turbines' small engine. They are small enough to fit in the palm of a hand and were built layer-by-layer with 3D metal printers. Printing these parts will contribute towards a revitalization of the industry, he says. "If we as a country are to start building our own engines, we have to start designing and fabricating products. This is shifted to China, but also an embrace of industry printing is one of these change-makers. It's far more than a manufacturing tool. It's a manufacturing revolution."

3D Printing Turbomachinery for Super Critical CO₂ Systems

Hanwha Power Systems achieves 80% faster build time and 90% less material with Velo3D's Sapphire

VELO^{3D}

While it may take hundreds of parts to construct power generation equipment, there are mission critical ones that can determine the performance of the entire system. Many of these highly optimized parts can be tricky to manufacture and present some of the greatest engineering challenges that high-tech companies face. Tradeoffs often must be made between performance, availability, volume, quality and cost.

Chad Robertson, senior engineer at Hanwha Power Systems, and his team are developing turbomachinery for a high-efficiency power-generation system utilizing Supercritical CO₂ (s-CO₂) as the working fluid in a recompression Brayton cycle (RCBC). Heat input to the cycle will be delivered from a concentrated solar-power array. The solar power project, which is in-part supported by the Department of Energy's Office of Energy Efficiency and Renewable Energy, has an end goal of using this equipment for a concentrating solar-power plant.

Stratasys Direct ensured accurate dimensional measuring of the shrouded impeller with a Coordinate Measuring Machine (CMM).

Hanwha

Hanwha Power Systems is part of Hanwha Group, a FORTUNE Global 500 company that is South Korea's seventh largest. There are some 6,000 units of Hanwha-designed and manufactured integrally geared compressors and expanders in operation worldwide.

VELO^{3D}

Tool Health

Once the combustor has been thoroughly tested and benchmarked, final performance improvements. He's also planning to work on the components, an unorthodox move that many aerospace pundits would agree is bold. Smith is determined. "VELO^{3D} believes that you can use additive for full-scale," he says. "For future gas turbine development, we aim to leverage the power to integrate features such as an efficiency-boosting recuperator, printed-in insulating and cooling geometries."

It's a matter of lower cost, shorter lead-times, or abbreviated supply chains. To consolidate dozens upon dozens of components into a single 3D-printed and greater mechanical integrity than the welded and assembled alternative, technology is enabling this small company to meet its design goals. Smith fully intends his 100 goal of 1000 hours, among other objectives.

is freed from traditional even existing technologies such that rely on defining to maximize differentiation.

Validation of Part Quality

all properties of the extremely important holes forward. The greater than 14,000 will be in a high so it is critical that the turbines are well project. Stratasys sand and heat-treated, to measure tensile properties.

is a general specification of nickel alloy results all exceeded requirements. The test samples were TM requirements.

ected in review, and FPI. No detected by the scans, need and spin tested design conditions and 3D using FPI.

CT scan of the Hanwha shrouded impeller.

"The success of the centrifugal impeller wheel prototypes Stratasys Direct made for us with the Sapphire machine from Velo3D has definitely increased our interest in additive manufacturing," says Robertson. "It has opened up design freedoms for our team, and sparked a renewed effort to better quantify the material properties and capabilities of additive manufacturing parts. The combination of the state-of-the-art 3D printing and expert project management truly did make the impossible possible."

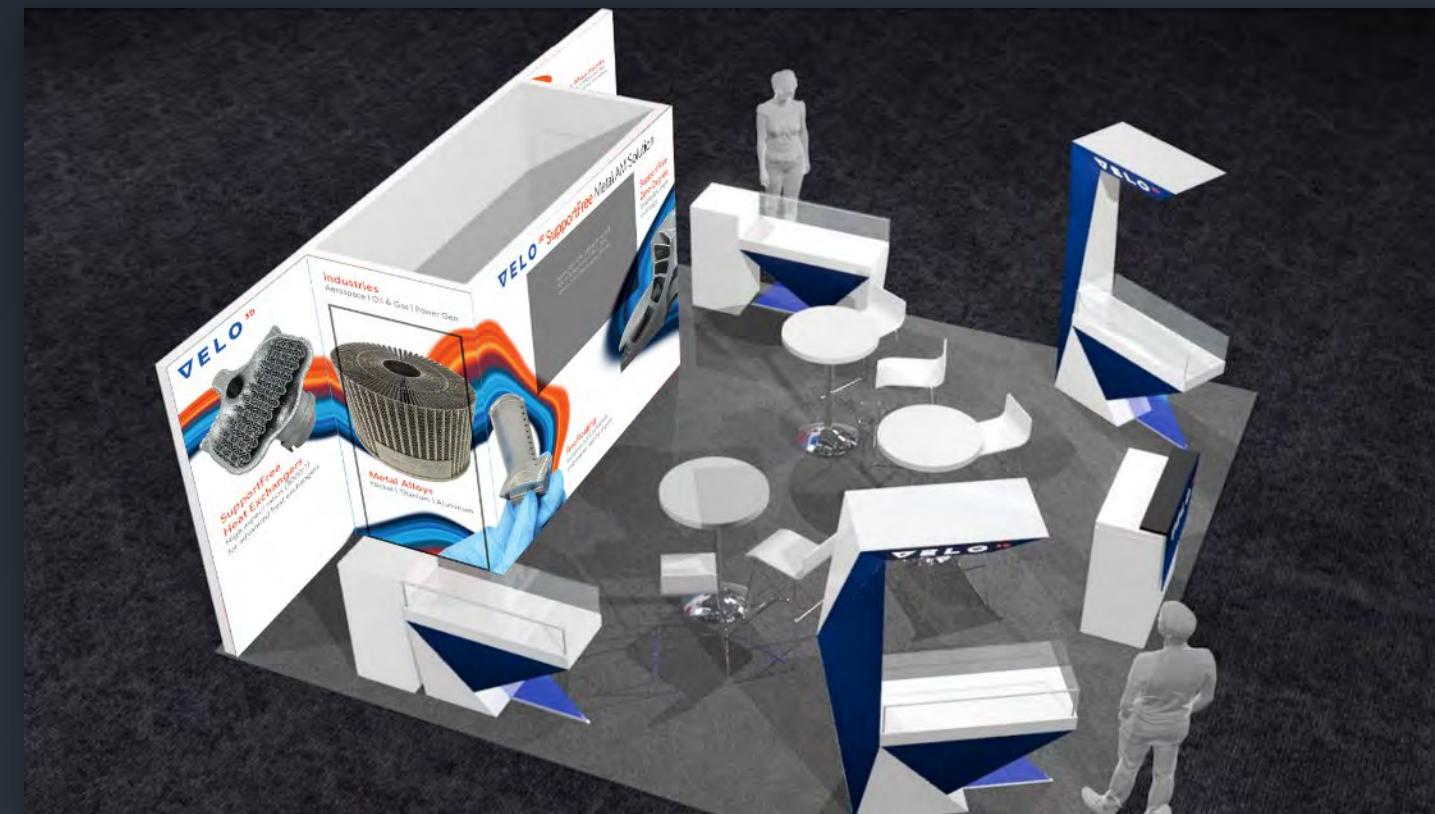
EVENT DISPLAYS

Additive Manufacturing Industry Events

VELO3D

Branded displays featuring multiple walls, a large video monitor for presentations, several standing display cases and overhead banners.

Photoshop, Illustrator, InDesign, Lightroom, Photography



VELO^{3D}

SupportFree Heat Exchangers
High aspect ratios (3000:1) for advanced heat exchangers

Industries
Aerospace | Oil & Gas | Power Gen

SupportFree Metal AM Solution

SpaceX, Aerion Rocketdyne, Honeywell, PWR, Protolabs, Knust Goldwin, TNSC, Strategy Direct Manufacturing, Duracor

SupportFree Zero-Degree
Enables low angle overhangs

FreeFloating
Increases build utilization and enables nesting of parts

SupportFree Manifolds
Large Inner Diameter (100mm) for manifolds, crossovers, and volutes

mikearaya.com



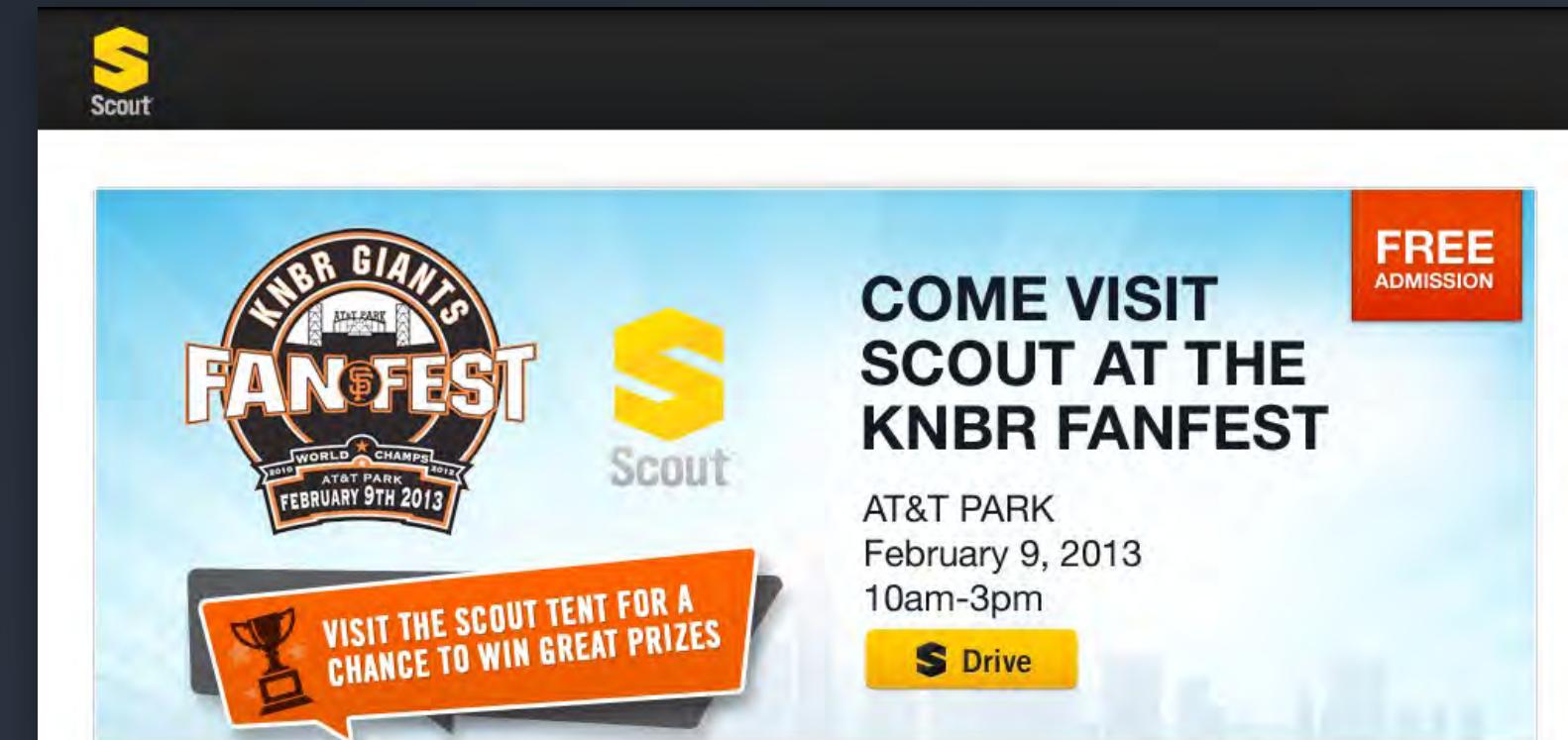
EVENT DISPLAYS

SF Giants Fanfest

TELENAV

Scout Team branding for the SF Giants Fanfest event. Featuring custom printed attire, email blasts, giveaway items, branded activities for visitors and more.

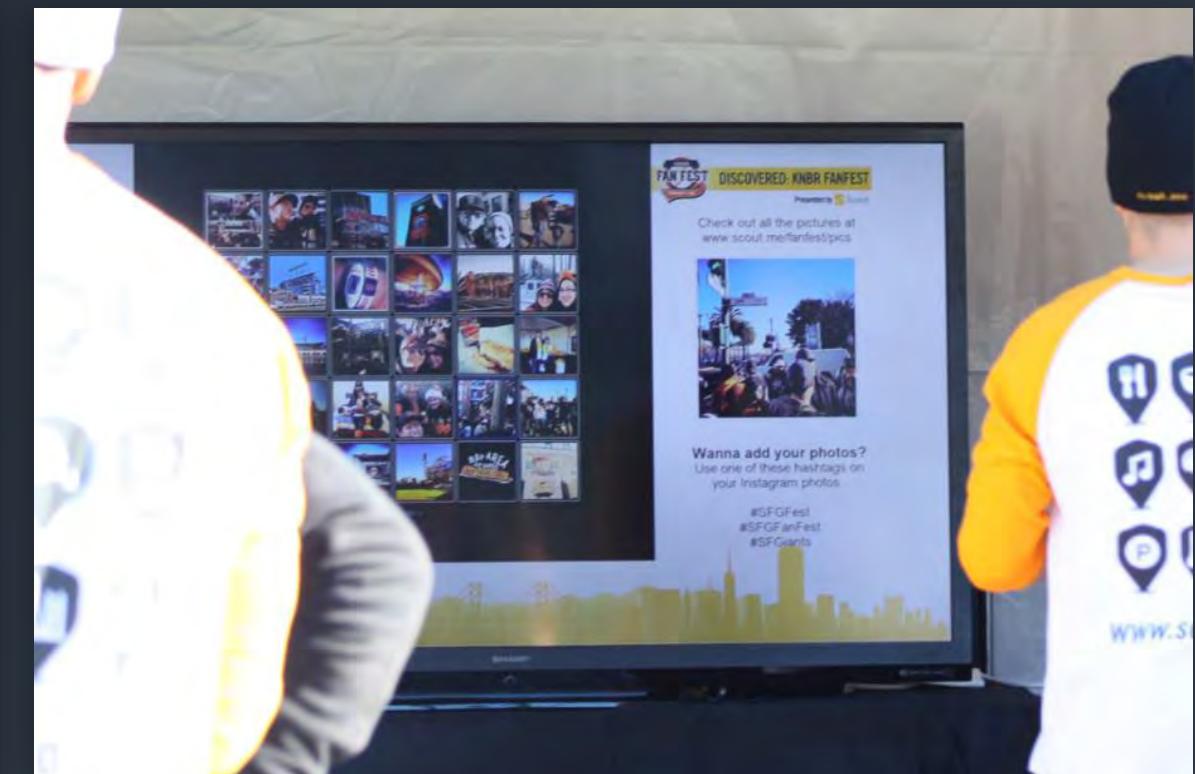
Photoshop, Illustrator, Flash, Photography



Come meet Scout – your daily personal navigator – at the KNBR Fanfest!

Scout is your perfect sidekick to help you power through your daily commute. With personalized and important information at a glance and a one-of-a-kind discovery engine, Scout makes your trip easier, less stressful, and more productive. Come visit our on field tent to say hi and enter for a chance to win free prizes!





PRODUCT PHOTOGRAPHY

Additive Manufacturing Metal 3D Printed Parts Showcase

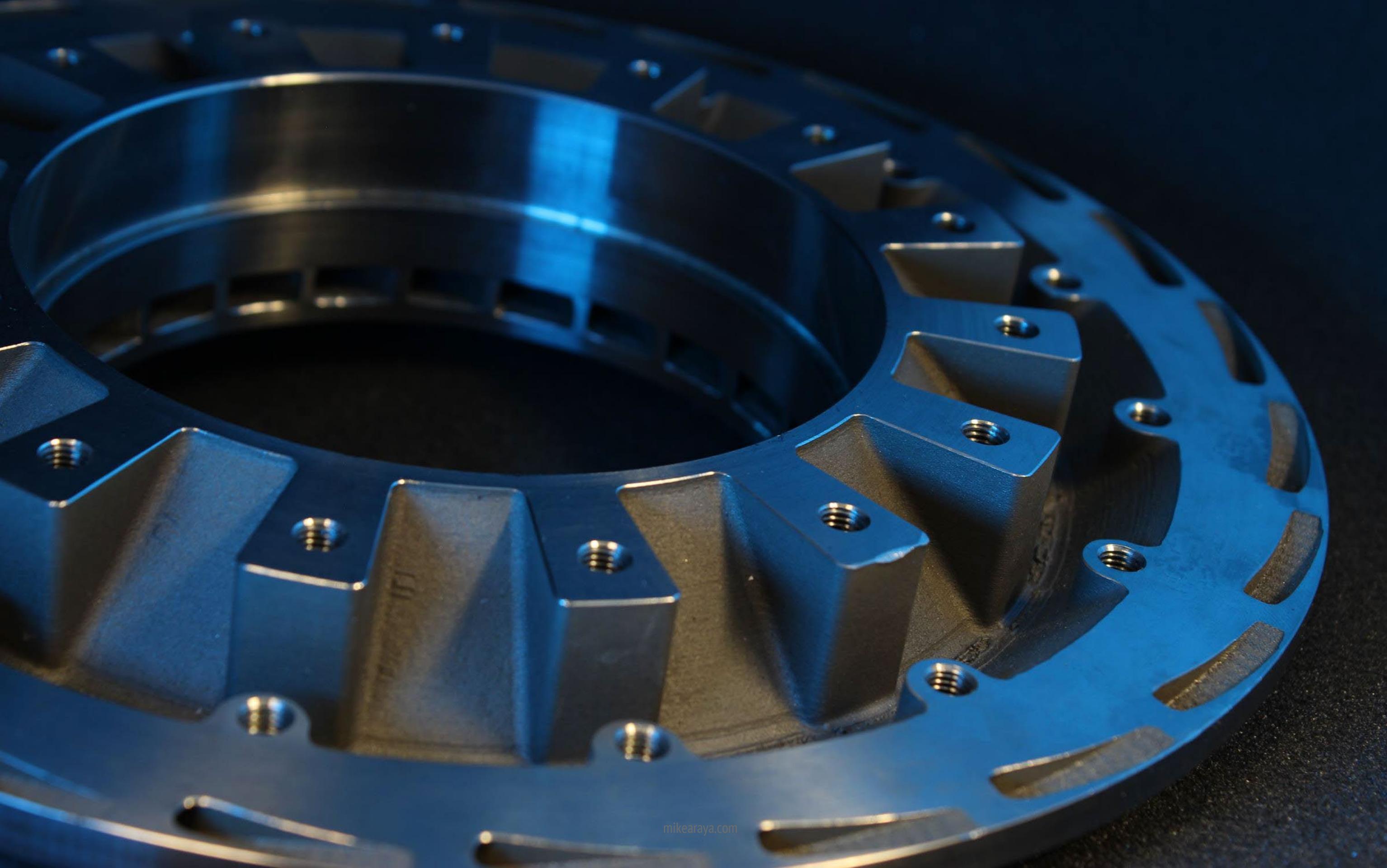
VELO3D

A sample of a larger collection of product photographs for VELO3D's image resource library, used in presentations, marketing materials and large prints.

Highlighting key features and technological advancements in metal 3d printing, such as fine details, large solid bodies and intricate geometries.

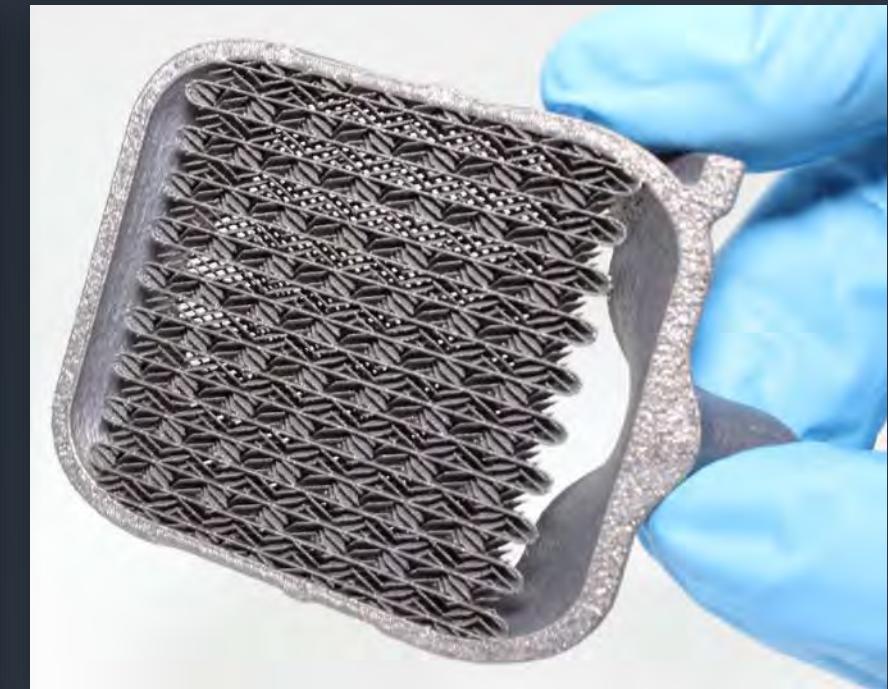
Photoshop, Lightroom, Photography











MICHAEL ARAYA // GRAPHIC DESIGN AND MULTIMEDIA

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