Never a dull moment when you’re 120 feet above the ground

Ken Maschke
Civil Engineer
Years on the job: 5

What’s been your favorite project so far?
“That’s easy—repairing the practice facility for the Chicago Bears. We had to complete the job in time for summer practices. When we finished, we were invited to a closed practice. It was great! I got to meet some of the players. And the next year the team made it to the Super Bowl. I like to think it was because they had a better practice facility.”

Do you get out of the office much?
“Last year my job sent me to Denmark for six months. I traveled to ten different countries while I was there.”

How do you keep work and life in balance?
“As an engineer, I get lots of time to do the things I love outside of work, like soccer, teaching, and playing guitar.”

Engineering named one of Best Careers 2008 by U.S. News & World Report

Got 5 minutes? Find out if civil engineering is for you

Play a game
Tap into your inner engineer with online games: asce.org/kids

Watch Design Squad
Eight high school contestants tackle engineering challenges for actual clients. pbskids.org/designsquad

Find a summer program
Experience engineering first-hand and have a fantastic time. Look for programs at: engineeringedu.com/summercamps.html

It’s your life. Your world... How will you make a difference?

I design animal park exhibits that educate and entertain

I plan city bike routes that make travel safe and eco-friendly

I build dams that improve the lives of Cambodian villagers

How long will I be in school?
4 years for a bachelor’s degree.

Will there be jobs when I graduate?
You bet! New civil engineering jobs are expected to increase 18% by 2016.

How much money will I make?
$46,500 is the starting salary with a bachelor’s degree. It goes up from there!

Source: U.S. Department of Labor, 2007
Civil Engineers. We make a difference.

Civil engineers are changing the world all the time. We dream up creative, practical solutions and work with teams of smart, inspiring people to invent, design, and build things that matter.

Imagine... building a better world

Design things that matter

“To help Cambodian villagers grow rice year round, we built a dam that collects water during the rainy season and releases it during the dry season. Now the villagers can double the amount of rice they grow, giving them essential food and income. It feels great to help change the lives of people so far away.”

– Matt Sioul and Wil Cao, friends and civil engineers, volunteer with the international humanitarian organization, Engineers Without Borders.

Be creative

“I work with animal caretakers to design habitats that penguins will accept as their real life home. I love the creative challenges that are part of my work, like simulating rocks that the birds would naturally climb on but are also easy to clean.”

– Jennifer Nakayama, civil engineer, designs animal habitats at SeaWorld.

Love what you do

“I love spending time with the people who will benefit from my projects. When I meet people at their homes and we can’t hear each other over the freeway noise, I know my work will change the quality of their lives.”

– Erin Fletcher, civil engineer, develops noise barriers that make life quieter for neighborhoods near freeways.

People helped per day

Want to help people in a BIG way? Become a civil engineer

Doctor: 20
Teacher: 120
Civil Engineer: 25 million

How one engineer makes a difference

Schools for quake victims

When the 2008 Sichuan earthquake hit, cities and towns were destroyed and millions were left homeless. Yan Xiao, a USC engineering professor who was visiting China at the time, saw the disaster area first-hand and got to work designing new schools that could be constructed quickly.

What makes these schools great? They’re inexpensive, easy-to-assemble, earthquake resistant, and fireproof. To top it off, they’re made from bamboo—a green and sustainable construction material that’s widely available in China.

Better bike lanes

“Share the road.” That’s the call for cars and bikes to coexist peacefully, but it’s not always easy. Sometimes it can be downright dangerous. To help change that, a group of civil engineering students at Northeastern University in Boston designed bike lanes to make their city safer for cycling.

Although Boston has several bike paths running through parks, they are separated from each other by busy roads. The students mapped out a plan to connect three popular routes, making it possible to ride uninterrupted from one end of the city to the other.

What she does

Samantha Salvia works on improving the water supply for 25 million Californians.

Why she loves it

“In one word? Relevance. Water is one of the most pressing challenges facing our society.”

What she does for fun

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Source: U.S. Department of Labor, 2007

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