

INDUSTRY SHOWCASE

ENGINEERING

FEBRUARY 19, 2020

Hosted by:

COLUMBIA UNIVERSITY CENTER FOR  
**Career Education**



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**Tencent 腾讯**

**CUONO  
ENGINEERING  
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# THANK YOU TO OUR PANELISTS



## **Christine Djan, SEAS '16** Water Resources Engineer, Arcadis

Christine has been a Water Resources Engineer at Arcadis for 4 years, serving as a summer intern before joining full time. Her projects focus on coastal resiliency in the New York City area and involve client engagement, detailed design, and operation and maintenance. She enjoys coming to work every day and building a more dynamic and sustainable city for her fellow New Yorkers. She is also involved in diversity and inclusion initiatives for the company, serving as Women's Network president and Pride Network executive board member.

## **Brian Moreno, SEAS '09** Senior Researcher, ExxonMobil

Brian Moreno was born and raised in Miami, FL. He completed his B.S. in Chemical Engineering at Columbia University in 2009 and his Ph.D. in Chemical Engineering at the University of Delaware in 2014. His doctoral research focused on modeling the conversion of biomass into fuels and chemicals. Upon completion of his Ph.D., he joined ExxonMobil Research and Engineering in 2014 as an Advanced Engineer.

Since then, he has served as the Planning Advisor for the Process Technology Department and then returned to a technical role in 2019 as a Senior Researcher.

He currently works at the ExxonMobil research site in Clinton, NJ and lives in Manhattan.



## **Elam Birnbaum, SEAS '92 & '93** Lead Software Engineer, CLEAR



Elam Birnbaum is a veteran engineering professional with decades of experience building complex mission critical distributed systems. He has architected and built a market leading server product adopted by hundreds of companies of all sizes to drive their Interactive Voice Response (IVR) needs that collectively handles tens of millions of phone calls daily. He has also achieved the difficult task of balancing customer requirements with the need for timely delivery to produce all software releases on time, fully tested, and with the best feature set possible. Elam is currently a Lead Software Engineer at CLEAR (Clearme.com) leading one of 5 internal server-side software teams building the microservices SOA backbone on which CLEAR's rapidly growing business runs. Elam holds an MS in Mechanical Engineering from Columbia University.

## **Xuelan Zhang, SEAS '11** Software Engineer Lead, Next Jump

Xuelan Zhang started at Next Jump as a Software Engineer in 2012. Coming from an Electrical Engineering background, she was relatively inexperienced when she first started in Software Engineering. However through determination and hard work, Xuelan became one of the brightest and best engineers that Next Jump has ever saw. In a matter of a year, she was managing teams and other fellow engineers. Under her coaching and leadership, she pushed our travel product to new heights. Currently, she is the Co-Head of our HR Technology suite of apps. This has also been her 5th year on MV21, Next Jump's highest senior leadership group. In 2018, she won The Avengers Award, our company's highest annual recognition award that not only recognizes leadership, but stewardship towards others as well. She's one of our top engineers, an amazing coach, a role model for all, and all of that's on top of the love and care she puts into raising her son, Ethan.



# PROGRAM

## Industry Showcase: Engineering

Wednesday, February 19, 2020

6:00 – 7:30 p.m.

### Panel – 6:00-6:30 p.m.

*Tips for the panel:*

- Take notes on what the panelists are discussing and use this insider industry information to help you make choices in your career.
- While you are listening to the panelists, jot down any questions you have to use as conversation starters during the networking portion.

### Networking – 6:30–7:30 p.m.

*Tips for networking:*

- First, recognize that this is a two-way conversation that starts simply by introducing yourself!
- Your professional introduction can include: Who you are (name, school, major, class year, etc.), highlights of your relevant experiences (current/past projects, internship/work experiences, knowledge, skills, interests, etc.), and close your introduction with a question that will further the conversation.
  - Example: “You mentioned on the panel the need for analytical skills in your field. Can you tell me a little bit more about how you use those skills on projects at your company?”
- Ask for business cards or jot down the names and companies of the professionals you meet. If you want to stay in touch with them after the event, send them a follow-up email or connect with and message them on LinkedIn.
- In your note, mention something specific you discussed with them at the event. This will remind them of who you are and where they met you. When ending a conversation, be sure to thank them for their time.

If you have any questions, please feel free to ask a CCE staff member at the event.

# EMPLOYER LIST



Arcadis is an international company that provides consultancy, design, engineering and management services in the fields of infrastructure, water, environment and buildings. As a company, we take pride in providing jobs with competitive pay, comprehensive benefits and exciting career-path opportunities, and we are seeking both entry-level and experienced civil engineers, architects, construction managers, environmental engineers and scientists. We have a long history of reaching out to institutions such as yours for top-flight talent, thereby enriching our own organization with the “best of the best.” In 2019, we hired 259 new college graduates and 109 interns, and plan on filling our ranks with more talented entry level staff in 2020 and beyond!

## HIRING FOR

- Full-Time Jobs and Internships
- Environmental Engineers, Water Resource Engineers, Civil Engineers, Structural Engineers, Electrical Engineers

## Sponsorship

- Yes, we do sponsor visas for the right candidates
- Yes, we do hire for OPT/CPT



At Capital One, we don't only think big things - we do big things. We were the first company to develop and offer mass customization and personalization of credit card products, and we have been innovating relentlessly ever since. Today, we are a nationally recognized brand, a top-10 bank, and a scientific laboratory on a journey to become a leading high-tech company and digital innovator touching over 65-million customer accounts. Still founder-led by Chairman and Chief Executive Officer, Rich Fairbank, Capital One has grown to \$22 billion in revenue in just over 20 years. Capital One believes your career path is yours to design. Our campus programs are created to support your development and set you up for success, every step of the way. Excited to learn more? Visit [campus.capitalone.com](https://campus.capitalone.com) - we'll help you find the right fit.

## HIRING FOR

- Full-Time Jobs and Internships
- Technology Development Program & Technology Internship Program

## Sponsorship

- Specific roles are sponsorship eligible for a work visa and OPT/CPT

# EMPLOYER LIST



The Central Intelligence Agency's primary mission is to collect, evaluate, and disseminate foreign intelligence to assist the President and senior US Government policymakers in making decisions related to national security. CIA carefully selects well-qualified people in nearly all fields. Applicants must apply online at [www.cia.gov](http://www.cia.gov) to be considered for a position and must successfully complete medical and security processes. All positions are located in the Northern Virginia area.

## **HIRING FOR**

- Full-Time Jobs and Internships

## **Sponsorship**

- No, we do not sponsor
- Dual citizenship is acceptable



# CLEAR

CLEAR makes life easier and more secure by using biometrics – your fingerprints, eyes and face – to confirm that you are you, and keep you moving. Imagine a world where you can do virtually everything you need to – breeze through the airport, buy a beer at the game, check-in at the doctor's office, access your office building, and more – without ever pulling out your wallet or phone. Now in 60+ locations nationwide, you are your ID, credit card, ticket reservation and more with CLEAR.

We're defining and leading an entirely new industry, moving quickly with data-informed decisions, obsessing over our customers, and investing in great people to lead the way. Recently named on CNBC's Disruptor 50 List, winner of the SXSW Interactive Innovation Award and 2019 EY Tech Disruptor Award, we're working tirelessly to create frictionless customer experiences for our 4+million members across the country.

## **HIRING FOR**

- Full-Time Jobs and Internships
- Summer Technology Internship
- Engineering and Cyber Security

## **Sponsorship**

- No, we do not sponsor

# EMPLOYER LIST



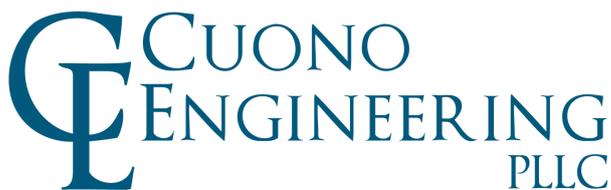
Our mission is to be the leader in life sciences, data and analytics. The healthcare industry is large, complex and rapidly evolving. So is marketing. So is data analytics. Only Crossix understands them all better than anyone else. The speed, accuracy and unrestricted connections Crossix provides can help your marketing work more effectively to improve health outcomes. Gain insights from connections between Rx, OTC, CPG, clinical, medical claims, hospital, consumer and media data, with best-in-class privacy safeguards that far exceed HIPAA requirements.

## **HIRING FOR**

- Full-Time Jobs
- Core analytics, Advanced analytics, Software Engineer, Data Engineer

## **Sponsorship**

- Yes, we do sponsor visas for the right candidates
- No, we do not sponsor for OPT/CPT



Cuono Engineering is a structural engineering firm dedicated to the art and science of structural design and restoration. The firm consists of a dedicated staff of structural engineers with experience in the design and rehabilitation of both new and existing historic buildings in the greater NY metropolitan area. Our experiences are focused on structural engineering and varied in terms of building types and materials. Our commitment to delivering technical excellence to our clients is absolute. We have worked on new buildings, restorations of historic buildings, renovations of existing buildings, and specialty projects such as art installation support structures, specialized steel connection design and shoring. Our experiences have included design of prefabricated commercial projects and sustainable methods such as structural insulated panels and design work on LEED projects.

## **HIRING FOR**

- Full-Time Jobs and Internships
- Summer Engineering Intern, Entry-level Structural Engineer, Mid-level Structural Engineer

## **Sponsorship**

- Yes, we may sponsor a work visa for the right candidate
- Yes, we do sponsor for OPT/CPT

# EMPLOYER LIST

## ExxonMobil

ExxonMobil, the largest publicly traded international energy company, uses technology and innovation to help meet the world's growing energy needs. ExxonMobil holds an industry-leading inventory of resources, is one of the largest refiners and marketers of petroleum products, and its chemical company is one of the largest in the world. For more information, visit [www.exxonmobil.com](http://www.exxonmobil.com) or follow us on Twitter [www.twitter.com/exxonmobil](http://www.twitter.com/exxonmobil).

### HIRING FOR

- Full-time Jobs and Internships- postings live in August
- Chemical, Mechanical, Electrical, and Civil Engineers

### Sponsorship

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT



The Lighthouse is KPMG's Center of Excellence for Advanced Analytics. With the agility of a tech startup and the backing of a leading global consulting firm, The Lighthouse uses cutting edge technology, creativity and innovation to provide break-through answers for our clients' most pressing problems. Here, a professional's creativity is limited only by their imagination – and we use that creativity, along with a vast array of techniques and tools, to bring data science, software engineering, and big data architecture solutions to life.

### HIRING FOR

- Full-time Jobs
- Data Scientists, Data & Analytics Engineers, Data & Analytics Modelers, Big Data Software Engineers

### Sponsorship

- No, we do not sponsor for work visas
- No, we do not sponsor for OPT/CPT

# EMPLOYER LIST



Nanotronics Imaging is a high-tech, cutting edge, microscopy and software company that delivers rapid testing and analysis solutions to sectors ranging from materials science, and semiconductors to life science and medicine. We are not just technology company but a science and technology company. We bring the brightest minds in physics, optics, robotics, artificial intelligence, and software engineering together in our offices in California, Ohio and New York to do things that have never been done before, and to take those solutions to the market.

## HIRING FOR

- Full-time Jobs and Internships
- Mechanical Engineer, Software Engineer, R&D Intern

## Sponsorship

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT



Headquartered in New York City, Next Jump is changing the world by changing the workplace culture. Next Jump funds its mission through its e-commerce platform Perks at Work, which serves over 40 million of Fortune 1000 employees with exclusive offers and products from over 30k merchants. Next Jump has created "OS for Workplace Culture" – a free suite of Culture Applications that let companies hire, retain and grow their employees. Next Jump has offices in New York City, Boston, San Francisco and London. For more information visit us at [www.nextjump.com](http://www.nextjump.com).

## HIRING FOR

- Full-time Jobs and Internships
- Software Engineer, UI/UX Designer

## Sponsorship

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT

# EMPLOYER LIST



We're in the business of making businesses better—people, processes, and systems. We're an end-to-end solution provider focused on connecting disparate parts within organizations. Experts in Digital Media Supply Chain, IP Management, CRM, AI, Data & Analytics, PMO/Project Management, and Custom Development. We strategize, advise, design, develop, and integrate technology solutions. Equal parts thinkers and doers. Strategists and technologists. We bring a balance of IQ and EQ to every engagement, and a depth of business and technical acumen to every problem. We believe in following through, in being upfront, honest and sincere. Currently 200+ people strong in four geographic territories, we've been recognized as a "Best Place to Work," a "Great Place to Work," "Fastest Growing," and "A Jewel." We are... OnPrem.

## **HIRING FOR**

- Full-time Jobs
- Analyst Roles

## **Sponsorship**

- No, we do not sponsor for work visas
- No, we do not sponsor for OPT/CPT



Red Balloon Security is a leading security provider and research firm for embedded devices across all industries. Founded in 2011 by Dr. Ang Cui, the company's core technology, Symbiote Defense, was originally developed within Columbia University's Intrusion Detection Systems Lab. Red Balloon Security's pioneering R&D is led by a team of world-class academic researchers and developers who have published seminal research papers in the fields of embedded security and intrusion detection, led US Department of Defense funded research activities, ethically disclosed vulnerabilities within hundreds of millions of ubiquitous embedded devices and worked as embedded security researchers within various intelligence agencies.

## **HIRING FOR**

- Full-time Jobs and Internships
- Security Researcher, Software Developer/Engineer

## **Sponsorship**

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT

# EMPLOYER LIST



STV is a leading, award-winning professional firm offering engineering, architectural, planning, environmental and construction management services. We consistently rank among the country's top 25 firms in education, corrections, highways, bridges, rail and mass transit. Throughout the United States and in Canada, STV's professional, technical and support personnel offer services to a broad and ever-expanding client base. We provide planning, environmental, design, program and construction management, and specialty services for the transportation, design-build, institutional and commercial building, advanced technology, industrial, oil & gas, and defense markets. STV has four divisions (Transportation & Infrastructure, Buildings & Facilities, Construction Management, Energy Services) located in over 40 offices.

## **HIRING FOR**

- Full-time Jobs and Internships

## **Sponsorship**

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT

## **Tencent 腾讯**

Founded in November, 1998, Tencent is a leading provider of Internet value added services in China. Since its establishment, Tencent has maintained steady growth under its user-oriented operating strategies. On June 16, 2004, Tencent Holdings Limited (SEHK 700) went public on the main board of the Hong Kong Stock Exchange. It is Tencent's mission to enhance the quality of human life through Internet services. Presently, Tencent provides social platforms and digital content services under the "Connection" Strategy. Tencent's leading Internet platforms in China – QQ (QQ Instant Messenger), Weixin/WeChat, QQ.com, QQ Games, Qzone, and Tenpay – have brought together China's largest Internet community, to meet the various needs of Internet users including communication, information, entertainment, financial services and others. As of March 31, 2017, the monthly active user accounts of QQ was 861 million while its peak concurrent user accounts reached 266 million. Combined MAU of Weixin and WeChat was 938 million. The development of Tencent has profoundly influenced the ways hundreds of millions of Internet users communicate with one another as well as their lifestyles. It also brings possibilities of a wider range of applications to the China's Internet industry.

## **HIRING FOR**

- Full-time Jobs and Internships

## **Sponsorship**

- Yes, we do sponsor visas for the right candidates
- Yes, we do sponsor for OPT/CPT

# NETWORKING TIPS

## Networking Conversation Topics & Questions

These sample topics and questions can help you engage with professionals during the networking portion of the event.

Please feel free to ask about or discuss topics beyond this list.

### Sample Topics:

- Mission and values of the organization
- History and leadership of the organization
- Size of the organization/office locations
- Diversity initiatives and programs
- Mentorship opportunities
- Affinity and employee resource groups
- National and/or international presence
- Structure/departments
- Typical job titles/roles
- Organizational culture
- Competitors and general landscape of the industry
- Current events/recent news in the industry
- Professional/educational background of the professional(s)

### Sample Questions:

- What attracted you to this career path?
- What keeps you in this career?
- What previous professional experience helped you most in this role?
- What is one thing you wish somebody would have told you before entering this field?
- How would you describe someone who is successful in this field?
- What does the day-to-day look like in your role? At your company?
- What do you enjoy most about your job?
- How do you see the industry changing in the next 10 years?
- What about your role in the next 10 years?

For more tips on making the most of networking events, please visit the Tips & Resources section of the CCE website: [cce.columbia.edu](http://cce.columbia.edu)