

VB Transform 2019

July 10 - 11 | San Francisco

Co-located with

VB Conversational
AI Summit

Presented by
bold360
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AGENDA

Wednesday
July 10th
8:00 am

Registration & Networking Breakfast

General Session
9:05 am

Welcome - Stewart Rogers, Analyst-at-Large, VentureBeat
Opening Remarks - Matt Marshall, Founder & CEO, VentureBeat
Keynote - Vanja Josifovski, CTO, Homes, Airbnb
Keynote - AJ Abdallat, CEO, Beyond Limits
Keynote - Kevin Scott, EVP & CTO, Microsoft

10:40 am

Tech Showcase Demos

11:10 am

Networking Break for Industry Verticals:
Retail/Ecommerce, Finance, Health, Industrial/Energy/Manufacturing, Games,
and Government

Expo Hall Open

11:45 am

NLP/Smart Speech Stage

Big Picture: Where are we in understanding human speech

Applications of deep learning, unsupervised, and supervised machine learning have accelerated the accuracy with which a machine can understand the meaning of human speech, and thus accelerate cognitive computing. We hear from four leading experts about the most compelling sorts of business applications that are now possible because of where we are with NLP and NLU in 2019.

Computer Vision Stage

Using AI to understand style

Fireside chat with Mike Fisher, CTO, Etsy

We hear from Mike Fisher, CTO of Etsy, a fast-growing e-commerce marketplace, about how the company is making very specific, targeted investments in AI in areas where other players are not active. Specifically, Etsy is using computer vision technology to understand the meaning of style, so that it can offer up results that match a user's particular style interests. Fisher will explain how Etsy relies on third-party technology in other areas, and how it scales its data science organization, which is more than tripling every year. Learn how Etsy has leveraged AI to increase its gross merchandise sales by hundreds of millions of dollars over the past two years.

The move to 'explainable' AI

Panelists: Robinson PIRAMUTHU, Chief Scientist for Computer Vision, eBay, Colin Parris, Vice President, GE Software Research, GE

When your deep learning algorithm for computer vision has millions or even billions of parameters, it's difficult to know exactly why your algorithm is making a decision. With the concern around bias of data sets, though, there's a move afoot to make more decision-making explainable. We hear from a few brand practitioners how they are doing this.

Business AI Integration Stage

News in the age of algorithmic recommendation

Panelists: Nick Rockwell, EVP & CTO, The New York Times

Nick Rockwell, CTO of the New York Times, has been driving his company's recommendation efforts to increase engagement among readers and drive subscriptions. He'll reveal more about what he's learned around the customer journey, how he's measuring success, and why ML is hard and essential for a modern media business.

Fireside Chat with Ratnakar Lavu, CTO, Kohl's

Implementing AI Architecture Across Your Company Stage

How to use AI efficiently across your entire organization

Panelists: Deepak Agarwal, VP of AI, LinkedIn

Professional social network LinkedIn has massive scale and is uses AI in just about every product feature. Now its "Pro-ML" project aims to equip all of its engineers with AI and Machine Learning tools, helped along by an "AI Academy," a five-week training program. It's VP of Artificial Intelligence, Deepak Agarwal, talks about how the company did it, and the results so far.

Chris Chapo, SVP of Data & Analytics, Gap, Inc.

IoT and AI at the Edge Stage

The massive opportunities wrought by IoT and AI at the edge

Panelists: Neil Green, Chief Digital Officer & VP of Transformation, Otis

Here we look at the technologies driving IoT and AI, and the various opportunities they're bringing at the edge, where cities, transport, privacy, security, communications, cloud investments and everything else are radically changing.

Intelligent RPA and Automation Stage

How AI is being added to RPA and automation:

An overview at the new 'intelligent' breed of automation technology

The first-generation of robotic process automation (RPA) and other automation technologies brought huge wins and gave way to names like Blue Prism, UI Path, and Automation Anywhere. But the first-generation technology wasn't terribly smart. Now, with the advent of AI, learning and even decision-making, are being built into automation tools, giving way to a whole new level of efficiency. Here are the trends for 2019-2021, covering supply chain, HR services, IT, and beyond.

12:35 pm

12:30 pm

General Session

1:35 pm

2:25 pm

Networking Lunch & Expo Hall Open

Keynote - John Fremont, Co-Founder & Chief Strategy Officer, Hypergiant

Keynote/Fireside chat with Greg Brockman, Co-founder & CTO & Ilya Sutskever, Co-founder & Chief Scientist, OpenAI and Kyle Wiggers, Staff Writer, VentureBeat

Tech Showcase Demos

NLP/Smart Speech Stage

The best brand chatbots

Panelists: Piers Lingle, SVP of Customer Experience, Comcast

A look at some of the most sophisticated brand chatbot experiences, and the technologies and other strategies that they use. The best ones do use plenty of NLP, but they also know when to move from open form to rules-based, to web links, and yes... humans. We also look at which of the NLP platforms are being used (Google, Cortana, Watson, Alexa, etc.), and what sort of tech layers or customization are on top.

Titans Panel

Platform companies Google, Amazon, Msft, square off on where they are taking NLP.

Computer Vision Stage

Visual search in ecommerce

We hear from several companies about how they let users search for content with visual search. For example, if a user sees some cool jeans worn by a movie star on social media, they can take a screenshot of that picture, and search for those jeans at the retailer. eBay, Pinterest, and other sites are leading the way. Increasingly, retailers are using chatbots, too. Pathbreakers built technology in-house, using convolutional neural networks, but now tech providers are helping offer this technology too.

The amazing improvements in image recognition

Panelists: Jasjeet Thind, VP of Artificial Intelligence, Zillow

In 2019, companies and researchers continued to make significant breakthroughs in computer vision and image recognition algorithms, allowing them to find better and more efficient ways to find meaning. It's led to Tesla's surprising announcement that it will have L4 self-driving cars by next year, and companies like Zillow to make strides in valuing homes more accurately and efficiently than ever before. We hear an overview of leading algorithm and results changes, and what they mean for the rest of the industry.

Business AI Integration Stage

John Kim, President, Homeaway

How to personalize in the age of privacy. Case study: Kayak

Panelists: Matthias Keller, Chief Scientist & SVP, Kayak

We hear from Kayak's chief scientist how the company responded to the heightened concern around privacy in 2018 and 2019. Kayak revamped its AI toolkit to bring more of its data collection on the edge, relies much less on Facebook and Google, and does more ad-serving and segmenting itself. That comes as the company's gotten more sophisticated with its data and algorithms, moving to Python to do more real-time.

Implementing AI Architecture Across Your Company Stage

Fireside Chat: Alex Stojanovic, VP of Applied Science and Semantic Platform Engineering, eBay

EBay's Alex Stojanovic, VP of Applied Science and Semantic Platform Engineering, talks about meta AI; one that determines which methods work at what times, learning and adapting to feedback. It's made possible by eBay's knowledge platform, which contextualizes the company's various data sources. While his story is rooted in e-commerce, the approach can be replicated in any industry.

IoT and AI at the Edge Stage

Fortify privacy and security credentials by keeping data on the edge. Here's how.

Smart companies are finding ways to keep personal data on the edge and avoid sending any personalized data to the cloud.

4:25 pm

Intelligent RPA and Automation Stage

Panel of intelligent RPA customers: Major enterprises discuss the deployment challenges, opportunities, and wins

Panelists: Herve Coureil, Chief Digital Officer, Schneider Electric

The vast majority of companies who use RPA say it is getting them wins, and that new Machine Learning and AI technologies are allowing them to make smarter decisions to get still more wins. Here's a look at the architecture and deployment governance decisions that smart companies are using to do this.

4:25 pm

Networking Break

4:40 pm

NLP/Smart Speech Stage

Ecommerce, messaging and conversion: Lessons from the leaders

We discuss how NLP is being combined with predictive analytics and personalized data to drive superior results in ecommerce and retail generally.

Computer Vision Stage

How computer vision is changing the game in offline retail

A look at the most compelling cases of personalization, engagement, and convenience by retail establishments. Amazon Go stores and the "connected store experience" offered by Kroger, in partnership with Microsoft, have both provided inspiration. In the latter, shelves in supermarkets offer real-time digital promotions and nutritional information, and displays will show you ads and promotions based on your age, gender, or previous purchases.

Business AI Integration Stage

How to develop and deploy AI responsibly

Panelists: Jen Gennai, Head of Responsible Innovation, Global Affairs, Google

The success of AI has come with a renewed appreciation and need for responsible and ethical AI throughout the development and deployment process of AI, from ensuring diverse voices and perspectives are in the right conversations, to testing for algorithmic fairness in datasets and models. We hear from some leading voices about how this is being done. We explore difficult areas like the difference between transparency and interpretability, and when "black-box" approaches are appropriate, and when they aren't.

How to set up your research or IT team for success with AI

Panelists: Bharath Kadaba, SVP & Chief Innovation Officer, Intuit

In most cases, IT and research leaders are in charge of the AI and ML agendas within a company, but there are various models for how to integrate learning and practices across a team. Here are several stories of how IT and research execs have pushed the agenda successfully.

Implementing AI Architecture Across Your Company Stage

The Path to Digital Transformation

Panelists: Marc Leibowitz, Global Head, Digital, Johnson & Johnson, Shelia Anderson, CIO, Corporate Functions Technology, Liberty Mutual

How do established companies best approach digital transformation, so that they can implement things like Machine Learning, AI and other data-driven strategies -- to stay on the cutting edge. Some companies with a strong technical heritage discuss how they are approaching this challenge.

Using the cloud to get you to the next step in organizational AI

Many high-growth companies may not have the scale of a Google or an Amazon -- and won't want to build their own AI infrastructure on-premise, so they're investing in the cloud to give them the resources to do what those giants are doing. Here's a look at how they're doing it.

IoT and AI at the Edge Stage

How 5G, AI, and IoT are speeding up real-time decision-making and efficiency in manufacturing, retail, and beyond

Panelists: Miku Jha, Founder & CEO, AgShift

We thought the distributed computing trend -- known as Internet of Things (IoT) - was big. But along came AI, and it's revolutionizing the way data can be computed at the edge, avoiding the need to send everything to the cloud. This is also important because of the need for privacy. And then you add 5G on top, to allow real-time decision making on these calculations, and you've got some amazing opportunities at the edge, from retail marketing to manufacturing responsiveness and precision, and more.

Intelligent RPA and Automation Stage

HR: The new era for human-machine relations challenges, opportunities, and wins

As robotics and automation get more efficient, humans are needing to step up and work hand-in-hand with those machines. And tomorrow, humans may no longer work side-by-side, because they'll be administering and managing robotics. Here we look at emerging technology trends from the HR perspective, including AI and ethics, bot management, and more.

5:30 pm

5:00 pm

Cocktail Reception & Expo Open

**Thursday
July 11th**

8:00 am

Registration & Networking Breakfast

**General Session
9:05 am**

Welcome Back - Stewart Rogers, Analyst-at-Large, VentureBeat

Opening Remarks - Matt Marshall, Founder & CEO, VentureBeat

Keynote - Andrew Moore, Head of Google Cloud Artificial Intelligence

Keynote - Hilary Mason, GM, Machine Learning, Cloudera

Keynote - Amit Ben, Head of Technology & AI, LogMeIn

10:40 am

Tech Showcase Demos

11:10 am

Networking Break for Industry Verticals:

Retail/Ecommerce, Finance, Health, Industrial/Energy/Manufacturing, Games, and Government

Expo Hall Open

11:45 am

NLP/Smart Speech Stage

Customer support: Impressive stories you'll want to write home to your CMO about

Panelists: Vishy Krishnamoorthy, Chief Product Officer, Humana, Scott Bajtos, Chief Customer Officer, VMware

These experts will talk about some of the best experiences we're seeing in customer support, how they were designed, deployed, iterated, and achieved results.

Customer journey: Making it personal, but not creepy

Panelists: Sherif Mityas, Chief Experience Officer, TGIF, Jessica Lachs, Head of Analytics, Doordash, Chris Williams, CPO, iheartmedia

To get amazing results with AI and the customer journey, companies are pushing to communicate with as much personalization as possible. But the trick is not going too far.

11:45 am - 12:35 pm

Computer Vision Stage

Trends panel: The most compelling new applications of computer vision in business for 2019

Panelists: Daniel Wulin, Head of Data Science & Machine Learning, Wayfair

With computer vision now surpassing human vision in some cases, machines are improving, or even taking over an increasing number of functions, from security to more compelling recommendation engines, and more. We hear from the leading computer vision platform providers.

Facial recognition in crisis: Is it moral?

Until recently, the assumption was that facial recognition, while a squishy area, was a legitimate area for numerous business applications, including advertising and security tracking. But in April, a number of incidents have collided, from China's spying on its Uighur Muslim minority, to challenges to initiatives by Amazon, Facebook and Microsoft and Google, to bring this assumption to question. A group of experts discuss where its safe, and critical, to use in business applications today.

Business AI Integration Stage

Creating a "framework" for AI decision-making

Fireside Chat: Ram Papatla, Head of Experiences, Booking.com

Travel giant Booking.com arguably was an early mover on AI and ML. But how does this data-driven company make the right decisions at the right time when it has so many variables impacting the customer experience. How does it decide among ranking, imaging, NLP, language translation, moderation of text, and when and where to extend feedback loops? How do you decide what is the right blend of technology and human help in any given process? We'll hear from Ram Papatla, Head of Experiences, about how the largest travel company is tackling these issues on a global scale.

Implementing AI Architecture Across Your Company Stage

Using AI for forecasting across your business

Panelists: Franziska Bell, Director, Data Science, Uber

Transportation company Uber has built a platform that automatically tracks historic events and performance within the organization, that allows Uber forecast increasingly accurately across the organization — and thus make it more efficient. Franziska Bell, Director of Data Science at Uber, has led this project, and explains how other businesses can learn from the company's experience. Businesses can build their own automated forecasting, relying on third-party open source solutions, and avoid hiring domain experts. While humans are still needed, businesses can now generate baselines from a suite of best-practice approaches, that are ten times better than having humans start on their own. Forecasting is then integrated into business intelligence tools that hundreds of users can use, generating forecasts with a push of a button.

Using AI at scale with 100 percent reliability: Case study of a major defense contractor

Fireside Chat: Dr. Shane Zabel, Chief AI Officer, Raytheon and Jana Eggers, CEO, Nara Logics

Raytheon, a major U.S.-based defense contractor and industrial corporation, designs and delivers military and commercial equipment and systems vital to national security. Raytheon's mission is 100% systems reliability because misses, in missile systems and humanitarian aid, can mean unintended human casualties. As the Chief AI Officer, Dr. Shane Zabel, has been charged with increasing the understanding and quality use of AI across this massive corporation. In a moderated conversation, Zabel will share the AI approaches being used -- including where deep learning and its black box fit; how data is collected, organized and shared, if shared; how different AI models are trained; when explainability is paramount and when not; and how he's teaching and leading the organization in their AI transformation, when the stakes are so high.

IoT and AI at the Edge Stage

VC Cross-fire

The big winners on the edge and the most important applications being built - and yet to be built.

Intelligent RPA and Automation Stage

Bots and meta-bots, and how to manage them with a cognitive layer

Bots are increasingly helping integrate various services and processes within enterprises. How do you best manage them all, so that you can make quick decisions smartly? We take a look at examples in the supply chain, IT services, and elsewhere.

Technology Track

Recent advancements in AI algorithms and systems

Panelists: Gil Ardit, Head of Product, Machine Learning, Lyft

Significant advances have been made in several areas in AI over the past year, including major algorithmic developments, improved applications in natural language processing and visual perception, as well as software frameworks like Kubeflow and PyTorch. All of which have implications for technology strategies for any ambitious company. Gil Ardit, head of product, Machine Learning at Lyft will provide an overview of these major developments, and talk about 2018/9 highlights in the ML/AI space, what to expect in 2020, and how to make the most of evolving technologies like AutoML and Reinforcement Learning.

12:35 pm

12:30 pm

Networking Lunch & Expo Hall Open

General Session
1:35 pm - 2:50 pm

Fireside chat with Swami Sivasubramanian, VP, Amazon AI & Rajeev Chand, Partner, Research, Wing

Keynote - Amir Khosrowshahi, VP & CTO, AI Products and Jonathan Ballou, VP, GM IoT, Intel

Keynote - Jerome Pesenti, VP of AI, Facebook

3:00 pm

Computer Vision Stage

Retail and ecommerce

How computer vision in search results and recommendations are improving online conversion.

Business AI Integration Stage

Diversity, Equity and Inclusion Imperative in AI Design

Panelists: Rodney Sampson, Chairman & CEO, Opportunity Hub

Experts, including some leading practitioners, share how to think about diversity throughout the development and deployment of AI, from ensuring diverse voices and perspectives are in the right conversations, to testing for algorithmic fairness in datasets and models.

Centralize or decentralize AI expertise? Which one is better?

Panelists: Alberto Lopez Toledo, CTO, Freshly

Some companies, such as LinkedIn, are pushing for full democratization of AI across their organizations, where all engineers are encouraged to learn machine learning and make the company AI-first. However, there's the contrarian view - espoused by companies like Autodesk - that an AI center of excellence can lead the charge, while the rest of the organization takes its cues from that group.

Implementing AI Architecture Across Your Company Stage

How to implement AI at massive scale

Panelists: Gil Ardit, Head of Product, Machine Learning, Lyft, Jeff Feng, Product lead, Data, Airbnb

An elite group of front-runners — Google, Microsoft, Amazon, Facebook, LinkedIn, Uber, Lyft, Airbnb, Twitter, Netflix — have built and scaled AI platforms to allow developers across their organizations to become more productive with ML and AI. This standardizes AI model training, deployment, production, and pipeline feature sharing — allowing AI projects to scale more easily. But it also requires harnessing data from the entire

organization. How do you collect and process data in the right databases and analytics systems -- and how do you make decisions amid this firehose of options? We hear from leaders at Lyft and Airbnb to about what are their latest steps in scaling an AI-first organization for 2020 and beyond.

IoT and AI at the Edge Stage

Developing for the edge: The most compelling tools you need in your stack, as you build out inference at the edge

The most compelling tools you need in your stack, as you build out inference at the edge.

Intelligent RPA and Automation Stage

VC Panel: Trends in investing in intelligent RPA

Trends in investing in intelligent RPA.

Technology Track

How the games industry is building a superior AI

Panelists: Danny Lange, VP of AI and Machine Learning, Unity Technologies

Case Study: Danny Lange, VP of AI and Machine Learning, Unity Technologies. Lange discusses why challenging an agent to navigate through a complex, game-like environment may be the best way to push the capabilities of artificial intelligence. He will address why he believes that the Obstacle Tower has the potential to help contribute to research into AI, specifically Deep Reinforcement Learning.

PANEL: The promise of Reinforcement Learning: Moving to a more general AI

Panelists: Ganapathi Pulipaka, Chief Data Scientist, Accenture

A ton of excitement has broken out after some leading reinforcement learning technologies, pioneered by teams at OpenAI, DeepMind, Uber, and others, have figured out how to build an AI agent that can learn how to do things almost from scratch -- with only a described task as a starting point. RL is now beating the world's best human players at games like Dota 2, Quake III or Montezuma's Revenge. Now companies are looking at ways to take reinforcement learning wins beyond games and applying it in areas such as advertising, e-commerce, warehouse management, manufacturing, finance and healthcare -- basically anywhere you have a constantly changing pool of tasks. We discuss the leading areas of application.

3:50 pm

3:50 pm

Networking Break

4:10 pm

NLP/Smart Speech Stage

The Future of Voice NLP - What's Next?

The big platform companies Amazon (with Alexa), Google (with Google Home and Assistant) and Apple (with Siri) pretty much owning the smart assistant paradigm, many companies have lowered expectations about voices apps, and have instead looked at text-based interactions with their customers. Is this the best way forward in 2019 and 2020?

Computer Vision Stage

Diagnostics in healthcare

We hear from several healthcare system representatives about how AI is driving results in healthcare while balancing privacy, ethics, and cost.

Business AI Integration Stage

Media industry: How are publishers using AI to get an edge

Moderated by Rich Karlgaard, Editor-at-large and Futurist, Forbes

Panelists: Lindsay Silver, VP, Product, CondeNast

We hear from executives at four media companies who are using AI platforms to discover, curate, and produce content to drive better results.

Implementing AI Architecture Across Your Company Stage

How to pool data from the assets across your company, and use it for AI

Here we discuss the right analytics and data lake strategy necessary to help with AI efforts across the enterprise. Until recently, there hasn't been the equivalent of an ERP or CRM system for integrating data from assets across a company.

IoT and AI at the Edge Stage

Case Study San Diego: "Bringing AI to your city -- via your nearest lamp post

Companies like GE, Intel, Qualcomm, and others are teaming up with cities like San Diego, San Francisco, and others, and inserting AI capabilities in small devices across lamp-post and other devices -- so that they can track and route everything, from traffic patterns and speeding to people tracking and more. Here's a look at how cities are getting hyper-intelligent, and how individuals and companies can benefit too.

Intelligent RPA and Automation Stage

How to intelligently automate business process across your company.

Panelists: Michael Setticasi, Sr. Director of Technology Alliances, DataRobot

Companies have been automating specific processes -- from HR, to IT, to finance and supply chain -- but often it has remained siloed. Here we look at how companies should be optimizing workflows and handoffs across the enterprise, to increase intelligence, quality, and reliability. With the cloud, shareable data an API-ready world, and affordable AI data-crunching, now is the time you can intelligently automate anything, from employee onboarding, support-ticket routing and contract facilitation -- keeping all employees in the loop wherever they are in the company.

Technology Track

Standardizing and scaling AI in your organization

Panelists: Andrew Hoh, Product Manager, Applied Machine Learning & Machine Learning, Airbnb

With so many opportunities to go after with AI, smart organizations are standardizing processes for machine learning and AI projects, allowing them to scale training and deployment, without having to reinvent the wheel each time. Here's how to do it.

Semantic Search: Success stories

Panelists: Ameen Kazerouni, Lead Data Scientist, Zappos

A panel of practitioners talk about the bleeding edge of semantic search, and how big successes implemented.

4:55 pm

5:00 pm

Closing Cocktail Reception & Expo Open

Transform 2019

Where? Union Square Hilton, Downtown San Francisco When? July 10-11, 2019

Questions about Transform 2019? Contact us at events@venturebeat.com

   #vbtransform