🏠   🔍   ⌄

📶 **LIVE ONLINE TRAINING**

Strata Data & AI Superstream Series

Natural Language Processing

Topic: Data

REBECCA NOVACK

RACHEL ROUMELIOTIS

June 30, August 25 & October 27, 2020

12:00pm – 4:00pm EDT , 12:00pm – 4:45pm EDT

JOIN OUR LIVE SUPERSTREAM ↗

Watch the recording.

SESSION 1 VIDEO ↗

SESSION 2 VIDEO ↗

⬆

What you'll learn   Hosts   Schedule

Sponsor

intel.

About the Strata Data & AI Superstream Series: This three-part series of half-day online events gives attendees an overarching perspective of key topics in data and AI today, including deep learning, data analytics, and natural language processing. Each of these areas is pushing the boundaries of what's possible with more computing power, data, and innovative algorithms.

Series schedule:

- Event 1: Deep Learning (completed)

- Event 2: Data Analytics—From Collection to Visualization (completed)

- Event 3: Natural Language Processing - October 27, 2020

With today's registration, you'll be automatically signed up for all sessions in the Superstream series. You'll also get access to video recordings of all sessions as they become available, including any you may have missed.

Description: Machines that can converse with humans are no longer science fiction; they're here, and they're in production. Get up to speed on what's possible today—systems that understand human language, answer questions, summarize large bodies of documents, and use that information to solve problems.

What you'll learn-and how you can apply it

- Explore the concept of sociolinguistic variation and see how it affects machine learning models

- Discover evaluation techniques for trained models to ensure your system is working for everybody

- Learn how to build language-powered apps fast using pretrained open source and cloud natural language models

- Understand how to run inference NLP models and applications at scale using the Intel Distribution of OpenVINO toolkit

This Superstream is for you because…

- You want to explore the latest in natural language processing (NLP) tools and techniques.

- You want to learn how to use TensorFlow to build AI applications that can understand and create text.

- You care about fairness and want to understand what that means for your NLP projects in practical terms.

- You want to learn how to create language-powered apps without having to build a model from scratch.

Prerequisites

- Come with your questions

- Have a pen and paper handy to capture notes, insights, and inspiration

Recommended follow-up:

- Follow and explore *STRATA Superstream: NLP* (expert playlist)

About your hosts

Rebecca Novack is a senior acquisitions editor at O'Reilly, where she works with authors, trainers, and other content creators in the artificial intelligence and machine learning space. Rebecca has been in the publishing industry for over 10 years, with acquisitions experience in technology, linguistics, and education.

Rachel Roumeliotis is vice president of content strategy at O'Reilly, where she leads an editorial team that covers a wide variety of programming topics ranging from full stack to open source in the enterprise to emerging programming languages. She's been a programming chair for the O'Reilly OSCON, Fluent, Strata, Software Architecture, and Security Conferences. She's currently the programming chair for the OSCON and Strata Data & AI Superstream Series on O'Reilly online learning. She's been working in technical publishing for 10 years, acquiring content in many areas including mobile programming, UX, computer security, and AI.

Schedule

The timeframes are only estimates and may vary according to how the class is progressing

EVENT 3: NATURAL LANGUAGE PROCESSING - OCTOBER 27, 9:00AM–1:00PM PT | 12:00PM–4:00PM ET | 5:00PM–9:00PM UTC/GMT

Rachel Roumeliotis and Rebecca Novack: Introduction (5 minutes) - 9:00am PT | 12:00pm ET | 5:00pm UTC/GMT
- Rachel Roumeliotis and Rebecca Novack welcome you to the O'Reilly Strata Data & AI Superstream.

Laurence Moroney: Hands-On NLP with TensorFlow—From Zero to Hero (90 minutes) - 9:05am PT | 12:05pm ET | 5:05pm UTC/GMT

- Ever wanted to know how AIs understand and create text? It's not as hard as you might think. Google's Laurence Moroney takes you through the basics of teaching an AI to understand English so that you can analyze the sentiment in words. You'll then use predictive technology to train an AI—on a corpus of Irish songs—to create text and create an AI that writes its own ballads.

- Laurence Moroney is the lead AI advocate at Google. A veteran in the programming and machine learning industry, Laurence has authored over 20 books, including top-selling programming resources, science fiction novels, and even movie-related comic books. He's passionate about demystifying AI and ML for software developers. He's a recognized speaker all over the world and teaches the TensorFlow specializations on Coursera with Andrew Ng of deeplearning.ai.

- Break (5 minutes)

Rachael Tatman: Fairness and NLP (60 minutes) - 10:40am PT | 1:40pm ET | 6:40pm UTC/GMT

- Is it possible to unintentionally build bias into a system that only uses text input? How do you evaluate disparate outcomes from your NLP projects and work to avoid them? And how do you check if your system's working for everybody? Rachael Tatman offers a brief introduction to sociolinguistic variation and explains how this concept affects machine learning models. She also covers evaluation techniques for trained models and explores the types of projects it may be best to avoid.

- Rachael Tatman is a senior developer advocate at Rasa, where she helps developers build conversational AI projects using open source tools. Previously, she was a data scientist at Kaggle and researched computational sociolinguistics at the University of Washington. You can find her on Twitter as @rctatman.

Radhika Anand: Conversational AI in the Real World (sponsored by Intel) (30 minutes) - 11:40am PT | 2:40pm ET | 7:40pm UTC/GMT

- From the early days of Siri to being able to hold live, meaningful, context-driven interactions with customers, conversational AI is fast becoming a cornerstone of our daily interactions. And the NLP and NLU technologies that power digital assistants like Amazon Alexa are finding their way into enterprises. From triaging patient queries in a healthcare setting to providing stellar customer service to workflow automation across customer contact centers, few areas remain

untouched by these technologies. Radhika Anand offers an overview of conversational AI, explores the broad, sweeping impact it's had across industries (particularly customer service), and highlights a few innovative customer use cases leveraging speech and language cognition technologies.

- Radhika Anand is director of strategic alliances for AI programs within developer relations at Intel. Radhika oversees a strong portfolio of software partners within the company's AI Builder program, leading the onboarding and account management of strategic partners and helping identify opportunities for expansion and growth. Her charter also includes streamlining and bringing strategic thought leadership in the areas of marketing, PR, and cross-BU collaborations across the AI Builder portfolio and advising portfolio companies on their GTM strategies.

- Break (5 minutes)

Dale Markowitz: NLP in a Hurry—Using Pretrained Models to Build Language Apps Fast (60 minutes) - 12:15pm PT | 3:15pm ET | 8:15pm UTC/GMT

- Who says you need big data to build apps with ML? Join Dale Markowitz to learn how to build language-powered apps fast using pretrained open source and cloud natural language models..

- Dale Markowitz is an applied AI engineer at Google Cloud. Previously, she worked at Google Research and online dating site OkCupid. She writes about machine learning at *Dale on AI*.

Zoe Cayetano and Raymond Lo: AI Inferencing with NLP at Scale with OpenVINO (sponsored by Intel) (30 minutes) - 1:15pm PT | 4:15pm ET | 9:15pm UTC/GMT

- Natural language processing (NLP) has impacted the way we build solutions that could model how we share information through speech and language. With the advent of deep learning and the introduction of cutting-edge neural networks for NLP, new and emerging use cases have sprouted, from sentiment analysis, customer support, and spelling and grammar correction to receipt scanning for tracking finances. Zoe Cayetano and Raymond Lo walk you through how to run inference (deploy) NLP models and applications at scale using the Intel Distribution of OpenVINO toolkit. You'll explore use cases including voice-enabled and contactless retail kiosks and those that are enabling the discovery of new pharmaceuticals and manufacturing methods.

- Zoe Cayetano is an AI/DL product manager at Intel working on a variety of interdisciplinary business and engineering problems. She's passionate about democratizing technology access for everyone and working on projects with

outsized impact on the world. Previously, she was a data science researcher for a particle accelerator at Arizona State University, where she analyzed electron beam dynamics of novel X-ray lasers. She holds bachelor's degrees in applied physics and business.

- Raymond Lo is the software evangelist at Intel focusing on the OpenVINO toolkit. Previously, Raymond was the founder and CTO of Y Combinator-backed augmented reality company Meta and the technology evangelist for Samsung NEXT. During his PhD studies, Raymond worked with Steve Mann, who's widely recognized as the father of wearable computing.

Rachel Roumeliotis and Rebecca Novack: Closing Remarks (5 minutes) - 1:45pm PT | 4:45pm ET | 9:45pm UTC/GMT

Support / Sign Out

© 2020 O'Reilly Media, Inc.

Terms of Service / Privacy Policy