The Future of Machine Learning

Alon Mei-raz, Head of Product, Haven OnDemand

#SeizeTheData
Understanding real world behaviour requires machine learning

Data volumes mean that the human cannot review all data

The human analyst will almost always be required to make a final decision

– Real-world is not an absolute science
– Risk inherently lies with the operators

Technology should be used to aid the human analyst/developer

– Amplify human with intelligent technology
– Triage and prioritize information
– Provide tools to support decision analysis and investigation

What we desire
What we feel
What we relate to
What we dislike

Private | Confidential
Machine learning at the service of business
Augmented Intelligence

**Broad**
- Artificial Intelligence
  - Pattern recognition
  - Machine Learning
  - Data mining
  - Analytics
  - Image processing
  - Computer vision

**Precise**
- Machine translation
  - Natural language processing
  - Speech processing
  - Unsupervised learning
  - Deep learning
  - Predictive learning
  - Pattern recognition
  - Deep Neural Networks
  - Face recognition
  - OCR
  - POS-tagging
  - Anomaly detection
  - Clustering
  - Structured prediction
  - Acoustic modeling
  - Segmentation
  - Pose estimation
  - Named entity recognition

**Signal processing**
- Audio signal processing
  - Computational linguistics
  - Object recognition
  - Motion analysis
  - Structured data analytics
  - Inference
  - Speaker ID
  - Neural Networks
  - Transduction
  - Bayesian inference
  - Image registration
Vision: Make machine learning accessible to everyone

- Workplace Social Intelligence
- Social Capital
- Advanced Search
- Philips
- Cultural Exchange
- Ayni
- Mobile
- Transformative customer experiences
- Dynamic Surveys
- Desktop
- Salesforce.com
- Enhance enterprise apps
- Consumer
- Cloud
- On premise
- iOT
- Global Healthcare, & Consumer Company
- Enterprise
Execution: Haven OnDemand & IDOL
Delivering proven machine learning capabilities through the Cloud or OnPremise

Haven OnDemand

– Simplify the application of machine learning through self-service APIs delivered through the Cloud
– Over 60 machine learning APIs and services that can be accessed self-service through the Cloud
– REST APIs deliver advanced audio, video, speech, image, and text analysis capabilities for data-rich app development

IDOL 11

– Automate discovery of trends, patterns, and relationships within the data
– Intuitive visualization for enterprise search & analytics
– Deep neural networks for rich media analytics
Power your applications with machine learning

Augmented intelligence
Powered by artificial intelligence, machine learning, and natural language processing

Connect to diverse data sources

Process and analyze

Create data-rich applications

Machine learning functions
Patterns, trends, relationships
Machine learning APIs

Self-Service
Leverage all data types and sources

Extract meaning from your data

Elevate IQ of apps to amplify human talent

Enterprise grade

Private | Confidential
HPE IDOL 11 – Powering next generation enterprise apps

Beijing Future Advertising

**Challenge**
- Deliver high value-add services for advertising clients
- Create a solution delivering next generation sports marketing

**Solution**
- HPE Media Management and Analytics Platform
- HPE IDOL

**Result**
- Integrated: Bring broadcast and social media analytics together
- Efficient: Automate monitoring & analysis of broadcasts & audience reactions. Reduced data classification and processing time from 10 tens to minutes
- Effective: Tap into insights from audience/consumer engagements
- Impactful: Provide guidance for strategy and resource investment
Introducing Haven OnDemand – Machine Learning as a Service
Over 60 self-service Machine Learning APIs & Services to Build Data-Rich Apps

Enterprise powered by advanced search APIs

Startups powered by speech to text, concept extraction, text analysis, and face detection APIs
Haven Search OnDemand – The sum is greater than its parts

Search as a Service delivers advanced search through the Cloud

– Built by combining Haven OnDemand Search APIs
– Advanced curated search for the enterprise
– Get started in minutes with enterprise-grade search
Haven OnDemand Developer Program

**Haven OnDemand**
- Self-Service APIs and Services
- Nearly 70 APIs for Building Data-Rich Applications
- Services for building powerful solutions e.g. Haven Search OnDemand

**Developer Community**
- Over 12,000 Haven OnDemand developers worldwide
- Knowledge and idea sharing through forums, blog, and social
- Resources via docs, tutorials, code libraries and quick-starts
- Experiential events & hackathons to connect and engage

**HPE Big Data Marketplace**
- Growing ecosystem of HPE and 3rd party applications
- Downloads, plugins, extensions, apps, demos, tutorials
- Marketplace promotes developer applications to HPE partners and customers
Making a Difference

History Meets Innovation
Big Data Hackathon with Yad Vashem
Experience the Vision:
HPE Haven OnDemand APIs and Services

www.havenondemand.com