Deep Learning for Business

Deep Learning Products & Services
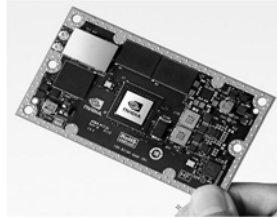
LettuceBot

LettuceBot

LettuceBot

— AI system that plants
  lettuce seeds with optimal spacing

— AI automatic fertilizer & herbicide
  nozzles control

— AI computer vision is used to distinguish
  lettuce sprout (fertilized) & weed (killed)
  • Estimated to reduce chemical (fertilizer,
    herbicide) use by 90%

LettuceBot

LettuceBot

— All self-contained processing
  - No cloud required
— AI GPU chip checks over
  5,000 field photographs of plants per minute
  - LettuceBot uses the NVIDIA Jetson TX1 (1 TFLOPS)
— Seeding with 0.25 inch precision while
  moving at 4 mph
— 40 acre coverage per day per machine
— 2,250 million plants services per year

LettuceBot References

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- Nvidia's Latest AI Module Can Fix Video Conferencing and Lettuce [Online]. Available: https://www.pcmag.com/news/352244/nvidias-latest-ai-module-can-fix-video-conferencing-and-let
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Athelas

Athelas

Athelas

— Computer vision based DL (Deep Learning) analysis of blood cells to generate diagnostic reports

Athelas

Athelas

— Can conduct WBC (White Blood Cell) count, cell morphology, nucleation features, etc.

— Enables more frequent and accurate blood checking (reduces doctor visits)

— Enables early detection of flu, anemia, malaria, leukemia, etc.

— Diagnose requires a small finger prick sample of blood

Athelas References

- Athelas Technology [Online]. Available: http://athelas.com/technology/

- Dick Costolo's advice to entrepreneurs [Online]. Available: http://www.cnbc.com/2015/12/08/dick-costolos-advice-to-entrepreneurs.html

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AIVA
(Artificial Intelligence
Virtual Artist)

AIVA (Artificial Intelligence Virtual Artist)

Aiva   Aiva Technologies

— Classical & Symphonic music composing
  AI system created in Feb. 2016

— DL (Deep Learning) with Reinforcement
  Learning based training
  • Over 10,000 music pieces and
    400 partners & artists

AIVA (Artificial Intelligence Virtual Artist)

Aiva Aiva Technologies

— 2016 June, AIVA was Registered as a Composer in the Authors' right Society SACEM (Société des auteurs, compositeurs et éditeurs de musique)

- First registered AI algorithmic composition system

- 2016 September, debut album Genesis for Piano and Orchestra was released

- Available at www.aiva.ai

AIVA References

- Deep Learning Researcher (m/f) | AIVA Technologies [Online]. Available: https://www.siliconluxembourg. lu/deep-learning-researcher-aiva-technologies/

- Artificial intelligence can write classical music like a human composer. It's the first non-human artist whose music is now copyrighted [Online]. Available: http://www.zmescience.com/science/ai-musical-composer/

- Wikipedia, www.wikipedia.org

Deep Learning for Business

Deep Learning Products & Services

Apple watchOS 4
HomePod speaker

Apple watchOS 4, HomePod speaker

Apple WWDC 2017

— Apple's WWDC (World Wide Developers Conference)

- Held annually in California since 1983
- Showcases new software and technologies for software developers

— WWDC 2017 announced AI technology advancements in its new products

- watchOS 4
- HomePod speaker

Apple watchOS 4, HomePod speaker

watchOS 4

— New Apple watch OS (Operating System)

— Several new Siri Watch Face designs
  • New watch faces with Siri cards centered

— QA Voice Recognition interface
  • Automatically displays ML (Machine Learning) selected personal information
  • Provides smart contact suggestions

Apple watchOS 4 & HomePod speaker

HomePod Speaker

— Siri powered smart speaker
  with QA Voice Recognition
  • Music playing
  • Traffic checking
  • Smart light control
  • Query of sports scores, etc.

— Similar to Amazon Echo
— Launches in December 2017 at $349

Deep Learning Systems & Services

Apple watchOS 4 & HomePod speaker

References

Apple References

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- watchOS 4 latest news: Release date & new Apple Watch features [Online]. Available: http://www.macworld.co.uk/ news/apple/watchos-4-latest-news-release-date-new-apple-watch-features-3640975/

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