Mohamed Elkamhawy
Senior ML Engineer at AWS – AI | UW Masters | Imagine Cup WW-Winner

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EXPERIENCE   [9+ Years of Experience]

Amazon, **Senior ML Engineer**, Seattle, WA   Oct. 2017 - Present
- Amazon Lex, AWS Service:
  Amazon Lex is a service for building conversational interfaces into any application using voice and text. Powering NASA, KBB & Liberty Mutual.
  - Designed & developed Conversations Generation & Utterance Expansion pipeline to expand customer utterances and build conversations around them on the fly within AWS minimum service build time.
  - Built Features Benchmarking platform for different variations of text and inject noisy data into training part: Typos, Synonyms, Morphological Variants, Contractions, Punctuations, and Emoji's.
  - Building an end-to-end AI data pipeline from Language Engineers to Scientists for creating datasets and ensure high quality.

Microsoft, **ML Engineer**, Redmond, WA   Oct. 2014 – Oct. 2017
- HDInsight:
  - Built Spark Service from scratch on top of Windows Azure.
  - Integrated Jupyter Notebooks in Azure HDInsight Clusters with adding special MS Magic commands.
  - Built KPI Dashboard for Spark service running clusters with focus on SLA that was shared weekly with Azure VP.
  - Built OMS for Spark Clusters to make it easier visualizing and performing logs analysis for HDInsight customers.
  - Performed Different performance tests (e.g. TeraSort) for Azure Spark clusters which got featured in Gartner report.
- Windows 10:
  - Designed & developed Incremental Clustering solution for millions of daily feedback data for Windows 10 beta versions.
  - Built Products classifier to specify the product incoming feedback. (Windows, Xbox, Office…)
  - Text Categorizer for classifying each incoming feedback to: Bug, Feature Request, Delighter…) + Sentiment Analysis.
  - Being the connection between Feedback team and MSR on utilizing their recent techniques.
  - Integrating clustering component into Office feedback system.

Microsoft Research, **Research Assistant**, Cairo, Egypt   Aug. 2013 – Sep. 2014
- Unsupervised Named Entity Recognition
  - In collaboration with Microsoft Office team, we have built a Named Entity Recognition framework out of Wikipedia text.
  - Built Web-Scaling pipeline to extract informal text from webpages then cleaning, auto-labeling and ingesting for CRF. It was scaled to 24 languages.
- Knowledge Extraction from Unstructured Text
  - Utilized Web-Scaling developed earlier to extract relations from unstructured text.
  - Built relations clustering solutions with visualization using KNN.
  - Integrated with Microsoft Knowledge Satori.

TripleSoft, **Co-founder, Tech Lead**, Cairo, Egypt   2011 - 2013
A uniform-platform for patients & doctors across Egypt.
- Led a team of 4 developers, shaped product vision, defined user scenarios & prioritized features.

AWARDS

- Microsoft, Machine Learning Engineer
  - **SHIP.IT Award**, Windows 10   2015
  - **3rd Place**, internal Garage Hackathon, Bing   2013
- Videolator, Co-founder, Tech Lead
  - 1st Place, Egypt's Innovation Award   2014
  - 1st Place, IEEE's Egyptian Engineering Day Award   2013
  - Imagine Cup WW, App Fast Track (AFT) Award   2013
- **B**est **S**tudent **A**ward, Egyptian Universities   2012

EDUCATION   [Graduation: 2021]

- **University of Washington – NLT Certificate:**
  Computational Linguistics (GPA**: 4.0**)
- **Cairo University '13 - Major: Computer Engineering**
  o GPA: **3.77** - with Honor Degree
  o Rank: 4th on class
  o Graduation Project: Videolator, Distinction (96.5%)

INTERNSHIPS   [Redmond, WA]

Microsoft, **Software Engineer Intern**   Jul. - Aug. 2012
- Built a recommendation system for Xbox Live services to allow faster media downloads through console-to-console connection.
- Integrated with Bing Maps for a worldwide visualization tool that could show the connections between different consoles across the globe.
- Presented to Xbox board of directors and used in Xbox one ship room.

SEIF Pharmacies, **Software Engineer Intern**   Jul. - Aug. 2011
- Built Business Reporting Platform using Oracle databases for the leading pharmacies in MEA region.

STUDENT ACTIVITIES   [Cairo University]

Microsoft Student Partner (MSP)   2010 - 2013
- **Tech Lead** of .Net vertical, leading multi-sited (200+) MSPs. My team delivered (15+) sessions, wrote (20+) blog posts.
- Co-founder of Microsoft Tech Club in Cairo University.
- Speaker & Organizer in (20+) sessions & events.

IEEE Computer Club - Vice Head   2010 - 2011
- Speaker & Organizer for different tech topics in partnership with ACM chapter in Cairo University.
- Got awarded **B**est **A**ctive **m**ember.

Cairo Computer Engineering Lab - Chairman   2010 – 2012
- Building a hub for Cairo University Students with focus on CS majors to provide them with: Technical Skills & Soft Skills (Presentations, Communications & Management)

SKILLS   [Each line is sorted: Excellent to fair]

- NLP, Machine Learning, Information Retrieval, Deep Learning, NLU, Spark, TensorFlow
- Python, C#, Java, C++
- Unit Testing, STL, OOP, DB Design, SQL, MVC ASP.NET