# Rezka Leonandya

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## EXPERIENCE

**Senior Data Scientist**, HappyFresh, Jakarta, Indonesia — Feb 2021 – Present

- Current

**Data Scientist**, FinAccel, Jakarta, Indonesia — Feb 2020 – Feb 2021

- Led, built, and maintain email autoresponder and chatbot model to help customer service. Automatically resolved 53% incoming daily emails and 33% incoming daily chats.
- Designed and built the initial platform to semi-automatically train a machine learning model with batch data update.
- Built product recommendation system. Improved the batch prediction time by 8x with ANN. Worked with word embeddings, matrix factorization, and hybrid CF model.

**NLP Research Scientist**, Kata.ai, Jakarta, Indonesia — Sep 2018 – Sep 2019

- Built pretrained language models (ELMo, BERT, and ULMFiT) on unlabeled Indonesian conversational texts
- Built named entity recognition model with LSTM and pretrained LM.

**Graduate Research Student**, ILLC, Amsterdam, The Netherlands — Jan 2018 – Aug 2018

- A research collaboration between the University of Amsterdam and Facebook AI Research Paris. Did research on how to make neural networks learn to follow instructions from small data. Supervised by Dr. Germán Kruszewski (Facebook AI Research) and Dieuwke Hupkes (ILLC UvA).

**Data Scientist Intern**, ZyLAB, Amsterdam, The Netherlands — Jul 2017 – Oct 2017

- Implemented conditional random fields (CRF) model on Wikipedia dataset for named entity recognition for English, Dutch, and French languages. Work done under supervision of Prof. Johannes C. Scholtes, professor of text mining from University of Maastricht.

**Backend and Data Engineer**, CI Agriculture, Jakarta, Indonesia — Jun 2015 – Jul 2016

- Created pipeline for data acquisition. Used play framework (java) to create API which connects to postgresql and mongodb. Used python for data crunching. Implemented k-means clustering for land segmentation based on fertility, ground altitude, and ground water level.

**Data Scientist Intern**, Bukalapak, Jakarta, Indonesia — Mar 2015 – May 2015

- Worked on analytical dashboard of transaction data using RStudio.

## EDUCATION

**Saarland University**, Saarbruecken, Germany

- Ph.D in Computational Linguistics (Withdrawal) — Sep 2019 – Feb 2020
  - Worked on improving the A* parser for composing atomic representation of subgraph in AMR semantic parsing. Also played around with self-supervised semantic parsing with latent variable model and reinforcement learning.
  - Dropped out of the program due to family and financial reasons.

**University of Amsterdam**, Amsterdam, The Netherlands

- M.Sc in Artificial Intelligence — Sep 2016 – Aug 2018
  - Thesis: Training neural networks to learn to follow instructions from small data
  - Advisor: Dr. Germán Kruszewski, Dieuwke Hupkes
  - Focus: Natural language processing, transfer learning, multi-task learning, dialogue learning.
  - Cumulative GPA: 7.7 / 10

**University of Indonesia**, Jakarta, Indonesia

- B.S. in Computer Science — Aug 2011 – Aug 2015
  - Undergraduate Thesis: A semi-supervised approach for Indonesian named entity recoginition
  - Focus: Natural Language Processing and Information Retrieval
  - Cumulative GPA: 3.22 / 4.00

## PUBLICATIONS

### CONFERENCES

[1] R. Leonandya, D. Hupkes, E. Bruni, and G. Kruszewski, “Training neural networks to learn to follow instructions from small data” in *Proceedings of the 13th International Conference on Computational Semantics (IWCS 2019)*. Gothenburg, Sweden, May 2019.

[2] R. Leonandya, F. Ikhwantri, “Pretrained language model transfer on neural named entity recognition in Indonesian conversational texts” in *The 33rd Pacific Asia Conference on Language, Information and Computation (PACLIC 33)*. Hakodate, Japan, Sep 2019.

[3] R. Leonandya, B.D. Trisedya, and N.H. Praptono, “A semi-supervised algorithm for Indonesian named entity recognition” in *Proceedings of the 3rd International Symposium on Computational and Business Intelligence*. Bali, Indonesia, Dec 2015.

**EXPERTISE & INTEREST**

Natural Language Processing, Machine Learning, Data Science, Statistics, Bayesian Inference, Deep Learning, Self-Supervised Learning, Reinforcement Learning, Competitive Programming, Algorithms and Data Structure .

**TECHNOLOGY**

Python, PyTorch, Tensorflow, Google Cloud Platform, Amazon Web Service, Jupyter Notebook, Java, C#, Linux, Matlab, R .

**AWARDS & SCHOLARSHIPS**

- Indonesia Endowment Fund for Higher Education 2016 – 2018
  Full scholarship for Master’s Education, covering living expenses and tuition fees

**LANGUAGES**

Indonesian (native), English (professional), German (basic).

[*CV compiled on 2021-03-08 for job purpose*]