

KOEN DESCHACHT

Machine learning engineer

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SUMMARY

With 18 years of experience as a machine learning engineer, I have a proven track record of developing applications from the ground up. My expertise encompasses the entire lifecycle of AI applications, and I'm a well-versed software developer ranging from embedded systems, mobile and web applications up to cloud infrastructure. Passionate about my work, I thrive on learning new technologies and application domains.

RECENT WORK EXPERIENCE

Machine learning engineer & full stack developer

Give a Day 2020–present

- Created machine learning methods to detect voicemails in audio fragments, predict the availability of users for phone calls and to identify like-minded people
- Developed a complete web CRM for volunteers, including communication, planning, expenses, documents and contracts

Founder, machine learning engineer & full stack developer

Stepwise 2018–2020

- Developed a dynamic programming algorithm to compute the optimal training program for a runner, taking into account the current condition, target goal, recovery times and days available for training
- Created a low-latency on-device prediction method to accurately predict speed and cadence of a runner even in the loss of GSP signal and sudden speed changes

Blockchain and full stack developer

Cegeka 2017–2018

- Built 4 different blockchain proof-of-concepts, including the smart contracts, blockchain integration and web UI
- Created an AI application to reconcile financial transactions from different sources for a large auditor

CTO and machine learning engineer

Scriptbook 2015–2016

- Hired, lead a team of 4 machine learning engineers and 1 web developer
- Developed a system that outperformed human experts to predict movie box office, using an in-depth analysis of the movie screenplay with extensive feature engineering and an ensemble of ML models

For 17 more projects, see <https://koendeschacht.be/projects>

EDUCATION

Ph.D. in machine learning

Katholieke Universiteit Leuven

2006 – 2010

Master in informatics (magna cum laude),

Katholieke Universiteit Leuven

2001 – 2005

For 19 scientific publications and patents, see

<https://koendeschacht.be/publications>

SKILLS

Experienced in designing and implementing **complex algorithms** such as machine learning models, blockchain applications, recommendations systems, web crawlers or high performance key-value stores.

Driven by innovation ranging from developing novel algorithms from the ground up to rapid prototyping with state-of-the-art technologies and frameworks

Good communication skills and experience in working collaboratively in teams, with experience as scrum master and CTO.

Proven track record in achieving deliverables and honouring deadlines, with experience in more than 12 software projects and two 4-year scientific research projects.

TECHNOLOGIES

Python, javascript, java, C, Rust

TensorFlow, SkLearn, Numpy, Librosa, Nalgebra, Jupyter Notebook, rustlearn, deep learning, linear models, SVM's, neural networks, random forests

Vue, Angular, Django, Java Spring, SQL

Nltk, Apache OpenNlp, Stanford NLP, Solr

Azure, AWS, docker, serverless computing