Guido Zuidhof

I'm a self-starter (see GitHub) and am currently in my final year of the artificial intelligence master's programme at Radboud university. I'm looking for an internship in a commercial data science team (for approximately 3 months).

I focus on applying machine learning methods to real world problems, ranging from predictive models for for instance computer-aided medical diagnosis, to recommender systems and multi-armed bandit problems with the goal to maximize revenue.

Personal Data

Occupation: Artificial Intelligence Student
Location: Nijmegen, The Netherlands
email: me@guido.io

Education

Current — Artificial Intelligence
February 2015- — Master of Science, **Radboud University**, Nijmegen

2011-2015 — Kunstmatige Intelligentie (Artificial Intelligence)
Bachelor of Science, **Radboud University**, Nijmegen

2005-2011 — VWO
High School, **S.G. Augustinianum**, Eindhoven

Notable projects

Fall 2015 - Early 2016 — Classifying law area of Dutch legal texts
Text mining project
Law area meta-data is often not present in in legal documents. Manual classification is a time-consuming process. Created a method to automatically solve this multi-label classification problem. A recall, precision and F-score of greater than 0.96 was achieved.

Summer 2015 — Diabetic Retinopathy Detection
Kaggle machine learning competition - 11TH (top 2%)
Applied a state of the art convolutional neural network approach to automatically diagnose diabetic retinopathy (which is the leading cause of blindness when not treated) from retina pictures, trained on GPUs on a large cluster. Achieved better than human expert accuracy.

Spring 2015 — National data science bowl
Kaggle machine learning competition - 68TH (top 7%)
Developed a deep learning method for automatically classifying plankton from low resolution black and white images. Also helped develop method for unsupervised feature extraction based on kNN clusters of image patches.

2011-2015 — Miscellaneous
Hobby and university projects
Throughout the university completed many software projects, both curricular and extracurricular. These include a robot cooking assistant, a novel *Swype*-based input method for VR, video games, game plugins, 48 hour game development competitions (gamejams), an educational in-class quiz application, an optimizer for contextual bandit problems, a WebRTC signalling server, and a live in-browser plotting service. See GitHub profile.

Skills

Machine Learning:	Python (NUMPY, SCIPY, SCIKIT-LEARN, PANDAS, TENSORFLOW), Matlab
Programming:	Object-Oriented, Functional (ELIXIR, PYTHON), Logic (PROLOG)
Workflow:	Version control (GIT), Agile (SCRUM), Automated testing (TRAVIS-CI)
Web Development:	HTML, CSS, JavaScript (WEBRTC, REACT.JS, METEOR)
Game Development:	Unity3D (C#), three.js, Phaser

Work Experience

Current
FEBRUARY 2016-

Teaching Assistant at RADBOUD UNIVERSITY, Nijmegen
Artificial Intelligence Programme

Student teaching assistant for the *AI at the Web Scale* course, in which students learn about the actual application of AI techniques (mostly machine learning).

2015-2016

Student Assistant at DONDERS INSTITUTE, Nijmegen
Institute for Brain, Cognition and Behaviour

Developed various demos for the NoiseTagging project. NoiseTagging is a BCI (brain computer interface) technique where the user is capable of giving input by looking at flickering visual stimuli, which is classified from EEG data. These demos were developed using the Unity3D engine and targeted both desktop and mobile platforms.

Languages

DUTCH:	Native speaker
ENGLISH:	Full professional proficiency
FRENCH:	Limited working proficiency
GERMAN:	Elementary proficiency