Artem Zhukov CV

<*https://github.com/ZhukovGreen*>

- [X] Czech Republic, Roznov pod Radhostem
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- [X] +420774081898

Software engineer and machine learning engineer with more than 4 years of
experience.
Interested in web applications, DevOps, infrastructure automation, and
bots. Compliment projects with machine learning, growing as a professional,
learning new technologies, experimenting and building interesting products.

Tech stack

- Linux operating systems
- Containerization, distributed systems, cloud computing (Docker, AWS,
Kubernetes)
- Software development (
    web, web applications, microservices, apis, bots,
    testing, code linting,
)
- Backend developer (
    python, aiohttp, numpy, pandas, scipy, pytorch,
    keras, scikit-learn, xgboost, opencv, freecad, aiogram
)
- Automation (
    CI/CD, Gitlab CI, Circle CI, Ansible, Python, docker-compose,
    Kubernetes, Vagrant,
)
- Other tools (
    shell scripting, git, docker, gitlab, postgresql, redis, celery, openapi,
    swagger, pre-commit
)
- vim, vim scripting

Free time

I contribute to open-source projects (i.e.
<*https://github.com/cr0hn/aiohttp-cache*>,
<*https://github.com/webknjaz/docker-freecad-cli*>,
), writing telegram bots (i.e.
<*https://github.com/ZhukovGreen/gcal_time_track_tg_bot*>,
), testing different neural nets architectures and learning new things.

Experience

System Architect | Machine learning engineer | Software team leader at Remak

Dates Employed Jan 2016 – Jan 2020

Employment Duration 4 yrs 1 mos

Building a software platform to support new products and the company processes.

Team leadership:
- leading the team of 4 developers, learning from them
- specified sprint epics, controlling team progress, reporting to the client
- determining backend architecture and technological stack

Software developer:
- building async microservices (Python, aiohttp, Docker, openAPI ...)
    - with the normal pythonic worker
    - where worker was a CDLL of .NET assembly and applied different approaches
    in parallelization
    - numeric microservices where main worker was a numpy or pytorch model
    - Automate the openAPI spec definition with the help of swagger, attrs,

    marshmallow etc.
- unit, integration and load testing
    - primary with the pytest
    - API mocking
    - integration testing for microservices based application
- documentation and code review
- setting up CI pipelines for linting, testing and building images

DevOps:
- Setting up automatic deployment system with a help of Gitlab runners, docker-compose, shell scripting and Gitlab CI.
- Writing Ansible and Vagrant scripts to deploy the app on Kubernetes
- Containerization of a different applications for the needs of the team (
    i.e. special cli version of FreeCAD, image with pythonnet support on Linux and Mono, linux with wine integration to run windows assemblies on linux
)
- Building infrastructure automation for development and staging environments
- Setting up app monitoring with help of Gitlab CI, Sentry and some scripting
- Setting up app templating, pre-commit hooks for a team

Machine learning engineer:
- applying machine learning to improve user experience.
    - Particularly speeding up the calculation processes
    - Supervise learning, mostly with gradient boosting and partly with the combination of neural nets in PyTorch
    - applying optimization with evolutionary algorithms (SicPy + PyTorch)

HVAC (heating, ventilation and air conditioning) proffesional

Dates Employed May 2006 – Aug 2016

Employment Duration 10 yrs 3 mos

I was working in a variety of positions within the HVAC industry
- Compact Air Handling Units (AHU) project manager (~ 1 year)
- AHU technical support (~1 year)
- HVAC designer (~5 years)
- Energy modeler for LEED certification (~ 1 year)
- Technical superviser on site (~1 years)
- Ventilation systems installer (~1 year)

Projects
- Air handling units selection engine powered by machine learning
- <*https://gitlab.com/remak-dva/docker-freecad-cli*>
- <*https://gitlab.com/zhukovgreen/pozemky*> - This is how I bought my home
- <*https://github.com/ZhukovGreen/gcal_time_track_tg_bot*> - This is how I used to track my time
- Dog breed identification <*https://github.com/ZhukovGreen/dog-project/blob/master/dog_app.ipynb*>
- Reinforcement learning <*https://github.com/ZhukovGreen/machine-learning/blob/submission/smartcab/projects/smartcab/smartcab/agent.py*>
- Supervise learning problem <*https://github.com/ZhukovGreen/UMLND/blob/d7a1326247705cac90120c266ca6296e7b19e257/finding_donors/finding_donors.ipynb*>
- PyTorch, transfer learning <*https://github.com/ZhukovGreen/pytorch-scholarship-challenge*>
- Unsupervised learning problem <*https://github.com/ZhukovGreen/machine-learning/blob/submission/costumer-segments/projects/customer_segments/customer_segments.ipynb*>

Education
Udacity

Degree Name Nano-degree
Field Of Study Machine Learning
Grade Nano-degree
Dates attended or expected graduation 2016 – 2018

<*https://www.udacity.com/course/machine-learning-engineer-nanodegree--nd009*>

Stanford University Online

Degree Name Online Education
Field Of Study CS229: Machine Learning
Grade NA
Dates attended or expected graduation 2016 – 2017

I passed through all lectures videos and keynotes, resolved all assignments.
Course syllabus: <*http://cs229.stanford.edu/syllabus.html*>

Donbass State Academy of Civil Engineering and Architecture

Degree Name Master's Degree
Field Of Study Mechanical Engineering (HVAC)
Grade M.Sc. in heating, ventilation, air conditioning systems
Dates attended or expected graduation 2002 – 2008

Courses

Udacity: PyTorch Scholarship Challenge from Facebook
A vast amount of different courses at Udemy, such as data structures and algorithms, PyTorch Reinforcement learning etc.

Languages
Russian - native
English - good proffesional level
Czech - good proffesional level

Social profiles
- GitHub <*https://github.com/zhukovgreen*>
- GitLab <*https://gitlab.com/zhukovgreen*>
- StackOverflow <*https://stackoverflow.com/users/4351027/artem-zhukov*>
- Twitter <*https://twitter.com/zhukovgreen*>
- LinkedIn <*https://www.linkedin.com/in/artem-zhukov-0556b422/*>