Alexander Kazeka

Senior Machine Learning Software Engineer

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Master of Science in Computer Science from Colorado State University, USA

Thesis: <u>Visual Location</u>
<u>Awareness for Mobile Robots</u>
<u>Using Feature-Based Vision</u>

Bachelor of Science in Computer Science from Mesa State College, USA MS Computer Science (Colorado State) and 9+ years of professional experience in machine learning (ML), natural language processing (NLP), computer vision (CV), and most recently unmanned aerial vehicles (UAVs) enable my deep expertise in building Al solutions. A competent full-stack software engineer, my passion is packaging state-of-the-art research to address critical business needs.

<u>aOrion</u> / Senior Computer Vision Software Engineer (UAVs)

SEPTEMBER 2019 - PRESENT

Development of computer vision components for UAVs—SLAM, navigation, surveying, custom payload drivers, and companion systems software at <u>aOrion/UVR</u>: leading unmanned helicopter design and fabrication bureau. Technology stack: Python, C++, ROS, Ardupilot, PX4, OpenCV, CUDA, TensorRT, pandas, NumPy, TensorFlow, PyTorch, Flask, microservices

- R&D state-of-the-art computer vision for obstacle avoidance, navigation, SLAM; integration with Ardupilot and NVIDIA Xavier
- Rapid prototyping of custom software for video streaming, stabilization, object detection and tracking, and GPS surveying in various environments
- Architecture design and software development for over-the-air updates: remote maintenance of aircraft systems

<u>Scout Exchange</u> / Senior Machine Learning Software Engineer (NLP)

APRIL 2016 - AUGUST 2019, BOSTON (REMOTE)

As a senior member of a team, I developed key capabilities in language processing and machine learning at goscoutgo.com—the first data-driven talent acquisition platform. Technology stack: Python, Flask, SpaCy, pandas, NumPy, scikit-learn, TensorFlow, PyTorch, R, MATLAB, AWS, microservices

- Deployed NLP-based recruiter matching system—increased quality of recommendations by 50%
 - Conducted A/B testing of recommendation features
 - Developed autoencoder-based resume summarization algorithms
 - ETL and dataset generation pipelines
 - Feature and model engineering, model selection, visualization of results

<u>litl</u> / R&D Software Engineer (Computer Vision)

JANUARY 2013 - APRIL 2016, BOSTON (REMOTE)

Developed computer vision and machine learning components for Room for More—a photo and video cloud backup service. Technology stack: Python, Flask, OpenCV, pandas, NumPy, scikit-learn, Caffe, AWS, microservices

- Developed deep-learning-based image gallery search by style system
- Data labeling tools for the above
- Designed and implemented of image, audio, and video fingerprinting and deduplication REST microservices
 - Image quality assessment; scene and facial recognition R&D

FACETS-ITN / Marie Curie Graduate Fellow

AUGUST 2010 - AUGUST 2011, FREIBURG, GERMANY

Research of visual motion processing in the cortex. I implemented state-of-the-art models and algorithms of neuromorphic spiking neural networks using C++. Data analysis with Python, pandas, NumPy, scikit-learn. Python seminars for graduate students.