ILIA SEVOSTIANOV

Computer Vision Engineer

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SUMMARY

I possess a strong background in both Python and C++, and have a deep understanding of computer vision techniques and tools such as OpenCV, PyTorch, TensorRT, and sensors calibration. I'm well-versed in training, tuning, and optimizing neural networks, and have experience in quantizing neural nets to improve performance. My experience in autonomous technologies projects, including the development of autonomous truck systems, lane departure warning systems, and precise UAV landing, showcases the ability to apply my technical skills to real-world applications. Additionally, I'm always eager to gain new knowledge and experience, making me a continuous learner and a valuable asset to any team.

EXPERIENCE

Computer Vision Engineer / Team Lead

TechTrans

March 2022 – Feb 2023

- Project prototype for tracking safety violations on the railway
- Railroad Simulator, which allowed to save resources on debugging algorithms and providing experiments
- Sensors selection
- Models training, datasets aggregation and augmentation with use of ClearML
- Objects tracking, detection
- Disparity and depth estimation

Computer Vision Engineer

Autonomous Technologies Laboratory

Feb 2021 – Innopolis University

- LED marker system for precise drone landing development
- Safe landing system for UAV development
- LDWS development for electrobus
- Neural networks deployment, optimization, quantization
- Sensors calibration (Cameras, Lidars) on a KAMAZ truck
- Bird eye view camera system creation for the car
- Objects tracking

Engineer Assistant

JBL Robotics

Aug 2018 – Feb 2019

- Development of ROS nodes to control a barista robot
- Design of cup holders and a gripper for the robot barista itself.

PROFILES

Github

- The main profile on which open source code and projects are available

WebSite

- Private website-portfolio

LinkedIn

- LinkedIn link

ACHIEVEMENTS

- Diploma for Outstanding Contribution to Science, 2021 year, Innopolis University
- Diploma for Outstanding Academic Achievements (full calendar year 2020) and Extracurricular Achievements, 2020 year, Innopolis University
- Aerobot 2020 competition Victory. The line and landing platform detection for the UAV
- Best Student of the Robotics Department, 2018 year, BMSTU

SKILLS

Python, C++

Computer Vision OpenCV, TensorRT, PyTorch, ClearML, Sensors Calibration; Neural nets training, tuning, and optimization, classical techniques, tracking, etc.

ROS2

Linux, Git, Bash

Tex

English B2

PUBLICATIONS

- Sevostyanov, I. E., Devitt, D. V., Trikhleb, D. V., & Baranova, A. A. (2022). System of Visual Positioning of a UAV for High Accuracy Autonomous Landing. Journal of Machinery Manufacture and Reliability, 51(8), 809-815.
- Mudiyanselage G. P. K., Trichleb D. V., Sevostyanov I. E. Computation of the Optimal Trajectory in the Three Dimensional Space with the Application of Supported Learning // Science Time. - 2021. - №. 6 (90). - C. 34-37. (Translated)
- Sevostyanov I. E., Devitt D. V. VISUAL POSITIONING SYSTEM OF MULTI-ROTOR BESILOTTORS FOR EXTENSIVE AUTONOMIC LANDING //Science Time. - 2021. - №. 6 (90). - C. 38-42. (Translated)
- IVANYUTENKO V. E. et al. A System for Determining the UAV Elevation Zone for the SAFE AUTONOMIC Landing Problem // School of Young Innovators. - 2021. - C. 98-101. (Translated)
- Kirsanov D. et al. Stiffness analisys of the Tripteron parallel manipulator //2020 International Conference Nonlinearity, Information and Robotics (NIR). – IEEE, 2020. – C. 1-6.
- Kalinichenko S. V. et al. Simulation in MATLAB of a vertical walking three-link robot //AIP Conference Proceedings. – AIP Publishing LLC, 2019. – Т. 2195. – №. 1. – С. 020008.

EDUCATION / COURSES

SkillFactory C++ Developer Specialization

Sep 2023 — SkillFactory

THE SELF-DRIVING CAR ENGINEER SYSTEM: Skills, Tactics, and Keys to break into the Cutting-Edge World

Dec 2022 — courses.thinkautonomous.ai

Convolutional Neural Networks

Jan 2022 — DeepLearning.ai

Structuring Machine Learning Projects

Dec 2021 — DeepLearning.ai

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

Nov 2021 — DeepLearning.ai

Neural Networks and Deep Learning

Oct 2021 — DeepLearning.ai

Robotics and Computer Vision Master Degree

Thesis: Quadruped Robot Development

2019 – 2021 — Innopolis University

Robotics and Mechatronics Bachelor's Degree

Thesis: Vertically Stepping Robot

2015 – 2019 — BMSTU

COVER LETTER

Dear Hiring Manager,

I am writing to express my interest in joining your company as a computer vision engineer. I am a highly skilled and experienced engineer with a strong background in both Python and C++, as well as a deep understanding of computer vision techniques and tools such as OpenCV, PyTorch, TensorRT, and sensor calibration.

I am well-versed in training, tuning, and optimizing neural networks, and have experience in quantizing neural nets to improve performance. My experience in autonomous technology projects, including the development of autonomous truck systems, lane departure warning systems, and precise UAV landing, showcases my ability to apply my technical skills to real-world applications. Additionally, I am always eager to gain new knowledge and experience, making me a continuous learner and a valuable asset to any team.

I am excited about the opportunity to work in Germany and believe that my skills and experience make me a strong candidate for the position. Thank you for considering my application. I look forward to the opportunity to speak with you further about my qualifications and how I can contribute to your company's success.

Sincerely, Ilia Sevostianov