

VADYM IVANCHUK

EDUCATION

- TECHNICAL UNIVERSITY OF MADRID *Madrid, Spain*
Master of Science in Biomedical Engineering *Jul/2020*
- TECHNICAL UNIVERSITY OF MADRID *Madrid, Spain*
Bachelor of Engineering in Telecommunication Technologies and Services *Jul/2018*
· Minor in Electronic Systems

WORK EXPERIENCE

- KAROLINSKA INSTITUTET *Stockholm, Sweden*
Bioinformatician at the Clinical Genomics Core Facility (SciLifeLab) *Jul/2021 – Oct/2024*
· Development of bioinformatics solutions for identifying somatic mutations in cancer patients and interpreting genomic and transcriptomic clinical data
- SPANISH NATIONAL CANCER RESEARCH CENTER *Madrid, Spain*
Research Assistant at the Bioinformatics Group *Feb/2021 – Jun/2021*
· Bioinformatics analysis and interpretation of biological and clinical single-cell RNA-seq data
- PUERTA DE HIERRO MAJADAHONDA UNIVERSITY HOSPITAL *Madrid, Spain*
Research Intern at the Liquid Biopsy Laboratory *Feb/2020 – Jul/2020*
· Molecular profiling of liquid biopsy samples from lung cancer patients
· Development of a somatic variant filtering pipeline for next-generation sequencing data
- BIOGIPUZKOA HEALTH RESEARCH INSTITUTE *San Sebastián, Spain*
Research Assistant at the San Sebastián Oncology Hospital *Dec/2018 – Sept/2019*
· Development of interoperable web, mobile, and server platforms to assist health professionals in designing personalized treatment plans and monitoring cancer patients
- TECHNICAL UNIVERSITY OF MADRID *Madrid, Spain*
Research Intern at the Life Supporting Technologies Research Group *Feb/2018 – Sept/2018*
· Development and integration of services in IoT devices of a Smart House Living Lab
· Design of a facial expression recognition system using machine learning and computer vision

SKILLS

- TECHNICAL
- **Computer Science:** Python, R, Snakemake, Docker, Singularity, SQL, HPC
 - **Machine learning and computer vision:** Keras/TensorFlow, Google Cloud, OpenCV
 - **Electronic systems:** C, MATLAB, embedded systems, FPGAs, Raspberry Pi, Arduino
 - **Web and mobile applications:** Java, Angular, JavaScript, HTML, CSS, Android Studio
 - **Wet lab:** Nucleic acid isolation from liquid biopsy samples and NGS/dPCR library preparation
- LANGUAGES
- **English, Spanish, Ukrainian, Russian, German (A2)**

RESEARCH

PUBLICATIONS

- Sánchez-Herrero, E., Serna-Blasco, R., **Ivanchuk, V.**, et al. (2021). *NGS-based liquid biopsy profiling identifies mechanisms of resistance to ALK inhibitors: a step toward personalized NSCLC treatment*. Molecular Oncology.
- Fustero-Torre, C., Jiménez-Santos, M. J., García-Martín, S., Carretero-Puche, C., García-Jimeno, L., **Ivanchuk, V.**, et al. (2021). *Beyondcell: targeting cancer therapeutic heterogeneity in single-cell RNA-seq data*. Genome Medicine.

CONFERENCES AND PRESENTATIONS

- Foroughi-Asl, H., Jeggari, A., **Ivanchuk, V.**, et al. (2022). **Poster presentation.** *Balsamic: bioinformatic analysis pipeline for somatic mutations in cancer*. Cutting-Edge Implementation of Precision Medicine in Europe Symposium (Stockholm, Sweden).
- Renevey, A., Caceres E., Jemt A., **Ivanchuk, V.**, et al. (2023). **Poster presentation.** *Implementation and validation of RNA-fusion detection in routine cancer diagnostics*. Cancer Research KI Retreat (Stockholm, Sweden)
- Janvid, V., Nyrén K., **Ivanchuk, V.**, et al. (2023). **Poster presentation.** *Enabling large-scale clinical sequencing through the automation of bioinformatic workflows and data management*. European Human Genetics Conference (Glasgow, Scotland).
- Maqbool, K., Foroughi-Asl, H., Jeggari, A., **Ivanchuk, V.**, et al. (2022). **Abstract presentation.** *Identification and Interpretation of Clinically Relevant Somatic Variants from Whole-Genome Sequencing Data*. 64th Annual Meeting of American Society of Hematology (New Orleans, United States).