#### Artem Kushner +1 604 910 5524



2019-2022 | 2023-2024

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2018-2019

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### **EDUCATION**

University of British Columbia

Computer Science BSc | Mathematics BSc

• Simon Fraser University 2018-2019

Biochemistry BSc

TECHNICAL SKILLS

Areas of Expertise: Unix, Databases, ETL Infrastructure, Computational Biology, ML, Systems Design, Mentorship

Languages: Python3, Typescript, Rust (demonstrable experience)

Familiar with C++17, Go, Matlab and Lisp

#### EXPERIENCE

· Staking Facilities GmbH 2021-2022

 $Backend\ Developer:\ Kafka/Redpanda/Rust\ Ingestion\ pipeline$ Munich (Remote)

Michael Smith's Genome Sciences Center

 $Computational\ Biologist:\ Variant\ Databases/Python/TS$ Vancouver, BC

· Khanh Dao Duc Lab, University of British Columbia 2020-now

Research Technician: Structural Biology, HPC, ML, Full-stack webdev Vancouver, BC

 Institute Medizintechnik(IMT), Hochschule Luzern 2019

Intern: Medical Device Classification, Paraplegia Luzern, Switzerland · F. Mirza Beg Lab, Simon Fraser University

Intern: Medical Image Analysis Vancouver, BC

 Brinkman, BlueCollar, A&G, Nata 2016-2018 Treeplanter (Forestry) BC, Canada

# Publications

Yu S., Kushner A., Srenik S., Dao Duc K., Detecting prokaryotic-like ribosome exit tunnel geometries within eukaryotic kingdoms, PLOS Biology, 2025 (In submission)

- Kushner A., Petrov A., Dao Duc K., RiboXYZ: a comprehensive database for visualizing and analyzing ribosome structures, Nucleic Acids Research, 2022
- Ecoffet A, Kushner A, Poitevin F, Dao Duc K. Using A Transport-Based Metric for Continuous Interpolation Between Cryo-Em Density Maps., AIMS Mathematics, October 2021
- Poitevin F, Kushner A, Li X, Dao Duc K. Structural Heterogeneities of the Ribosome: New Frontiers and Opportunities for Cryo-EM. Molecules. 2020 Jan 25(18):4262
- Abächerli, R., Kästli, M., Aerni, M.; Kushner, A., Boettger, K., Ljutow, A. Reducing Neuropathic, Chronic Pain in Paraplegic Patients Using a Virtual Walking System, IEEE Abstract

# REFERENCES

Khanh Dao Duc PhD, Assistant Professor Geoffrey Woolard **Anton Petrov** PhD, Co-Investigator

Abächerli Roger PhD, Professor, Main Lecturer

University of British Columbia Structura Biotechnology Georgia Institute of Technology IMT, Hochschule Luzern

## Interests & Hobbies

Interests (Biology): CryoEM/ET, Conformational Heterogeneity, MD, Digital Twins, Evolution, Cellular Biology, Oncology

Interests (CS): Compilers & Type Systems, TDL/GDL, RISC-V, Database Design, OSS Interests (Mathematics): Optimal Transport, Bayesian Inference, Differential Geometry, Diffusion Maps

Hobbies: Music, Running, History, Crafts