



EDUCATION

- University of British Columbia

Computer Science BSc | Mathematics BSc

2019-2022 | 2023-2024
- Simon Fraser University

Biochemistry BSc

2018-2019

TECHNICAL SKILLS

Areas of Expertise: Unix, Databases, ETL, Computational/Structural Biology, ML

Languages: Python3, Typescript, Rust (demonstrable experience)

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

EXPERIENCE

- CryoCloud B.V.

Contractor: Atomic models visualization software

2024

Utrecht (Remote)
- KDD Lab, UBC

Research Technician: Structural Biology, HPC, ML

2020-now

Vancouver, BC
- Staking Facilities GmbH

Backend Developer: Kafka/Redpanda/Rust ingestion pipeline

2021-2022

Munich (Remote)
- Michael Smith's Genome Sciences Center

Computational Biologist: Variant Databases/Python/TS

2021

Vancouver, BC
- Institute Medizintechnik(IMT), Hochschule Luzern

Intern: Medical Device Classification, Paraplegia

2019

Luzern, Switzerland
- F. Mirza Beg Lab, Simon Fraser University

Intern: Medical Image Analysis

2018-2019

Vancouver, BC
- Brinkman, BlueCollar, A&G, Nata

Treeplanter (Forestry)

2016-2018

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*University of British Columbia

Geoffrey WoolardStructura Biotechnology

Anton Petrov *PhD, Co-Investigator*Georgia Institute of Technology

Abächerli Roger *PhD, Professor, Main Lecturer*IMT, Hochschule Luzern

INTERESTS & HOBBIES

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

CS: Compilers & Type Systems, TDL/GDL, RISC-V, Database Design, OSS

Mathematics): Optimal Transport, Bayesian Inference, Differential Geometry, Diffusion Maps

Hobbies: Music, Running, History, Crafts