ROBIN AGUILAR

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WORK EXPERIENCE

Scientific Communications and Marketing Specialist October 2023 - Present
A-Alpha Bio *Seattle, WA*

- Launch company-wide infrastructure to facilitate internal and external scientific communications.
- Collaborate with scientists to communicate research findings via posters and talks at 8 national conferences.

Doctoral Researcher June 2019 - October 2023
UW Genome Sciences *Seattle, WA*

- Developed software tools and FISH assays to empower oncology diagnostics through microscopy methods.
- Created large-scale genomics analysis pipelines in Snakemake and NextFlow for broad clinical datasets.
- Designed 30+ high throughput experiments to derive biological insights from computational predictions.
- Curated curricula as a TA for 2 computational genomics courses providing $80k in instructional services.
- Communicated research findings through 5 publications and as an invited speaker to 8 institutions.

Computational Biology Research Assistant April 2015 - May 2018
DePauw University and Rare Genomics Institute *Greencastle, IN*

- Developed 3 bioinformatic pipelines to analyze protein structures associated with rare human diseases.
- Analyzed 10+ NGS, VCF, and GWAS datasets to communicate clinical findings to collaborators.

Computational Research Intern June 2016 - August 2017
UW — UNIGE — Stanford *Seattle, WA — Geneva, CH — Palo Alto, CA*

- UW: Developed Python app to investigate homolog pairing in yeast 3D genome organization.
- UNIGE: Leveraged statistical and molecular biology methods to study human tumor growth factors.
- Stanford: Applied computational methods to model DMD protein structure in a gene therapy approach.
- Communicated all internship program findings at 4 international genomics research conferences.

EDUCATION

University of Washington Seattle, Department of Genome Sciences *October 2023*
Ph.D. in Genome Sciences — Data Science Track — NSF GRFP Fellow — HHMI Gilliam Fellow

DePauw University *May 2018*
B.A. in Biochemistry — Minors in Computer Science and Spanish — Science Research Fellow

SKILLS

Computer Languages	Python (Pandas, Scikit-learn, NumPy), Unix/Linux, Jupyter, R
Databases	MySQL, PostgreSQL, Microsoft SQL, Airtable
Tools	Git, Snakemake, NextFlow, AWS, SVM, Shiny, Tableau
Illustration	Adobe Illustrator and Photoshop Suites, Procreate, Blender
Genomics Analysis	RNA-seq, scRNA-seq, scATAC-seq, Hi-C, NGS, GWAS, Imaging
Molecular Biology Techniques	FISH, Confocal Microscopy, PCR, CRISPR, IHC, Cell culture
Science Communication Clients	MIT, Caltech, Stanford, HHMI, NSF, Nature, ACS, SACNAS
Leadership	President and Co-Founder of UW GSAIMS