

AINSLEY LAI

Applied Mathematics & Informatics Undergraduate

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253-219-5315

Renton, WA

EXPERIENCE

Undergraduate Research Intern

Institute for Systems Biology

June 2022 – August 2022 Seattle, WA

- Worked under the Hadlock lab as part of the Summer Undergraduate Research Experiences Program
- Conducted data processing via PCA, data smoothing using a signal processing filter, and interpolation on a longitudinal dataset using Google Cloud Compute
- Used pySINDy (symbolic and sparse regression) to build equation models and investigate effects of noise in data analysis and machine learning on biological systems

Cashier

Albertsons

July 2020 – October 2020 Renton, WA

- Operated POS system and provided customer service

NRFU Enumerator

U.S. Census Bureau

July 2020 – Sept 2020 Tacoma, WA

- Aided the 2020 decennial census Non-Response Follow-Up operation by assisting in federal population data collection

PROJECTS

Survey of Laser Models

- Academic review paper that explores three different equation models for lasers.
- Link: [Here](#)

U.S. Gun Violence Visualization

- A collaborative data visualization of American gun violence using R-Shiny and tidyverse.
- Website: <https://ainslai.shinyapps.io/info201-af3-groupfinal/>

RELEVANT COURSEWORK

AMATH 301 – Beginning Scientific Computing

AMATH 383 – Intro to Mathematical Modeling

CSE 373 – Data Structures and Algorithms

Current Courses:

AMATH 481 – Scientific Computing

CSE 414 – Intro to Database Systems

EDUCATION

B.S., Applied Mathematics & Informatics

University of Washington

Sept 2020 – June 2024

Double degree

GPA – 3.93

AAS-DTA, Associate's in Arts & Sciences

Bellevue College

Sept 2018 – June 2020

GPA – 3.92

STRENGTHS

Hard-working

Analytical

Problem Solving

Detail-Oriented

Eager to learn

Team-oriented

SKILLS

Google Suite

Microsoft Office

R

SQL

MATLAB

Python

Java

Git/Github

HTML

CSS

Shell Scripting

LaTeX

ACHIEVEMENTS

- Consecutive Dean's List
- Graduated Bellevue College with High Distinction
- Graduated top 7% of high school class

INTERESTS

Technical

- Interest in computational mathematics
- Data science and analysis
- Data and Signal processing
- Numerical modeling

Extracurriculars

- Applied Analytics Club
- Table Tennis