Skyler Hallinan

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EDUCATION

University of Washington, Seattle, WA

Expected June 2021

Prospective B.S. in Bioengineering and Applied Math

• GPA: 3.76/4.0

Bainbridge High School, Bainbridge Island, WA

June 2017

• GPA: 3.99/4.0

• National AP Scholar, Biomedical Engineering Club Member, Math Club President

RELEVANT SKILLS

Lab: Pipetting, titration, chromatography, light microscopy, filtration,

spectrophotometry, general dissections, PCR and gel electrophoresis

Languages: Java, R

Experience with Matlab, Python, CSS, HTML, LaTeX

Design: Inventor, Flashprint

EXPERIENCE AND PROJECTS

Undergraduate Researcher, Dey Lab, Fred Hutch

June 2018 – Present

- Filtered through BLAST results of UniRef and target UniProt sequences in Python to identify useful genes matches, and subset metagenomic datasets with these genes
- Explored relationships between bile salt hydrolase genes and relative abundance of various metabolic pathways through model utility tests and correlation tests in R
- Implemented data visualization packages such as ggplot2 for presentation of results
- Presented scientific papers on gastroenterology advancements as well as own research in monthly lab meetings

Infant Hydration Monitor Team, Bioengineers Without Borders, University of Washington September 2017 – Present

- Discussed and designed numerous prototypes of infant hydration monitor targeted towards low-resource countries in Inventor and tested feasibility via 3D printing
- Worked collaboratively with other subgroups to establish device constraints

Statistical Analysis Intern, IslandWood, Bainbridge Island

July 2017 – August 2017

- Analyzed relationships between race/income and camp attendance across 10 years of demographic data via multivariate analysis, ANOVA, and correlation tests in R
- Recommended solutions to community access problems in final presentation to IslandWood board of education

RELEVANT COURSES

"BIOL 180-220 (Intro Biology Series)" "STAT 390 (Calculus-based Statistics)" "CSE 143 (Intro to Java II)"

"CHEM 237 (Organic Chemistry I)" "MATH 308 (Linear Algebra)"

"AMATH 301 (Intro to Matlab)"