

MATTHEW CARROLL

CONTACT

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2320 28TH AVE S, SEATTLE WA, 98144

EDUCATION

MASTER'S, COMPUTER SCIENCE AND IT

UNIVERSITY OF PENNSYLVANIA | 2020 - 2022

- Comfortable with Python, Java, C, C++
- Broad interest in networking, cyber security, low level programming and scientific computing
- Classes: Algorithms, Data Structures, Computer Systems Programming, Operating Systems, Math for CS
- Current Student, 3.8 GPA

BACHELOR OF SCIENCES, CHEMISTRY

UNIVERSITY OF PITTSBURGH | 2013 - 2017

PROJECTS

- Assembler and disassembler in C
- Data processing pipeline and analysis of parking fines, income and property value in Philadelphia
- Twitter analysis to predict flu outbreaks
- Implement Smith-Waterman genomic alignment algorithm
- Solvers for various games and puzzles

EXPERIENCE

SR RESEARCH ASSOCIATE- MOLECULAR ENGINEERING

ROCHE DIAGNOSTICS

APRIL 2020 - JUNE 2021

- Developed Python tooling to analyze complex synthesis methods, preventing 5 figure failures
- Worked on a growing international team to deliver novel sequencing technologies
- Performed complex synthesis of engineered biomolecules
- Drove internal initiatives to contribute chemistry solutions to rapidly advancing sequencing tech

RESEARCH ASSOCIATE- MOLECULAR ENGINEERING

STRATOS GENOMICS

JAN 2018- APRIL 2020

- Increased team efficiency by targeting reoccurring aspects of the workflow with software tools
- Developed tracking and organizational pipelines to ease "growing pains" as our team doubled in size
- Delivered cornerstone molecules that were paramount to successful exit by acquisition

INTERN - BIOTECHNOLOGY & GEOCHEMISTRY GROUP

PACIFIC NORTHWEST NATIONAL LABORATORY

JUN 2016 - DEC 2017