# Franklin Pezzuti Dyer

Undergrad, University of New Mexico
Computer science and mathematics
Graduating Spring 2024

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## Skills

**Programming languages**
C / C++
Java
Python
MATLAB
Javascript
Haskell
Scheme
Agda
SQL
HTML/CSS

**Tools**
Git
SQLite
Wireshark/libpcap
FLEX/YACC
GCODE
LaTeX

**Spoken languages**
English (native)
Spanish (C1 DELE)
German (UChicago proficiency cert)
Arabic

## Interests

Type-theoretic proof checkers
Security and software verification
Backend web development
Quantum computing

## Research

### Technical specialist on SEQUANA project
*July 2023 - present*
- Learning about tools for analysis of network packet capture files and intrusion detection (libpcap, Snort)
- Analyzing CSE-CIC-IDS2018 and other datasets

### ASSURE research fellowship recipient
*January 2022 - May 2022*
- Researched numerical methods of approximating fluid flow past objects
- Wrote detailed research report and delivered poster presentation of results

### Research assistant at Hand and Machine lab
*August 2022 - August 2023*
- Developed ExtruderTurtle Python library to design and manipulate solids and generate code for 3D printing
- Presented findings at TEI 2022 conference and UNM computational fabrication seminar

## Teaching

### Grader for Mathematical Foundations of CS
*August 2023 - present*
### TA and grader for Declarative Programming
*January 2023 - May 2023*
### Grader for Numerical Computing
*August 2021 - December 2022*
- Graded homework, lab assignments and tests
- Automated parts of grading using Scheme and bash
- Conducted recitations elaborating on key concepts
- Held weekly office hours and tutoring sessions
- Compiled supplementary notes to help students understand difficult concepts

### PROMYS 2022 Counselor
*July 2022 - August 2022*
- Met with high-school students daily to discuss number theory and mathematical proof-writing
- Gave detailed feedback on solutions to problem sets
- Designed mini-courses on special topics