

NORA GERA

US Citizen

@ nkg29@cornell.edu

+1 (419)-270-5429

Seattle, WA

nora-gera

ngera1

website

LEARNING

Compilers

Programming Language Design

Machine Learning

Artificial Intelligence

Discrete Structures

Data Structures

Functional Programming

Object-Oriented Programming

Algorithms

Operating Systems

Probability and Statistics

Differential Equations

Linear Algebra

Molecular and Cellular Bio-engineering

Bio-instrumentation

Confocal Microscopy

Optical Coherence Microscopy

Arduino Boards

TECH STACK

C#

.NET

Angular

SQL

Python

PyTorch

C

C++

Java

OCaml

Logisim

Assembly

MATLAB

ImageJ

CAD Pro

R

R Studio

LANGUAGES

English: Native

Spanish: Advanced / C2

REFERENCES

Prof. Andrew Myers

myers@cs.cornell.edu

Prof. Steven Adie

ABOUT ME

A dedicated and driven computer scientist, seeking to solve problems at scale.

EDUCATION

BS Computer Science | Cornell University

Aug 2021 – May 2021

Ithaca, NY

- Minor in Biomedical Engineering
- GPA: 4.0 (Dean's List All Semesters)
- Entered at age 15, graduated in 3 years

GRE Scores: 170/170 Quant, 161/170 Verbal, 6/6 Analytical Writing

EXPERIENCE

Software Engineer | Microsoft

June 2021 – Now

Redmond, WA

- Full-stack developer leading revitalization of a web app crucial for connecting Windows builds to external partners (Dell, HP, etc.) (Angular front-end, .NET back-end, SQL database)
- Enabled cross-team connections with database management for more successful, higher-performance, lower latency, back-end syncs, with over 2M+ API requests coming each day
- 1st place "Hack for Industry" in a global hackathon on a machine learning application for tumor detection and early intervention
- Committed to using a Computer-Science mindset to solve industry-scale problems
- Gained perspective on Cybersecurity and Privacy at Microsoft STRIKE events

Undergraduate Researcher | Cornell University

May 2020 – Dec 2020

Ithaca, NY

- With the guidance of Prof. Andrew Myers, added secure querying operations verifying object trust relationships in A Language of Secure Objects (ALSO), envisioning applications in Banking Transactions and Blockchain Security
- Analyzed information flow control in the ALSO implementation of the game, A-MUD

Undergraduate Teaching Consultant | Cornell University

Jan 2020 – May 2020

Ithaca, NY

- Worked as a teaching consultant for CS 2110-Object-Oriented Programming and Data Structures
- Helped students on monthly CS projects and conceptual understanding with consulting hours and managed grading of projects, assignments, and exams

✉ sga42@cornell.edu

Prof. Robbert van Renesse

✉ rvr@cs.cornell.edu

OTHER MAJOR PROJECTS

Memory Allocation System in C

- C, in-line RISC-V assembly
 - Created a thread-safe implementation of malloc, maintaining data and structural integrity
-

Buffer Exploit

- Call stacks, RISC-V assembly, and reverse-engineering
 - Demonstrated a friendly hacking challenge
-

Operational, Fully-Pipelined RISC-V Processor

- C, Logisim
 - Developed a fully functional RISC-V processor using logic gates for handling recursion and function calls within assembly instructions
-

Shortest-Path, Max Reward

- Java, Algorithms
- As part of constructing the algorithm, it maximized the number of monetary “coins” gained over the game walk of the shortest path algorithm by 15%