# Michael Wolf-Sonkin

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#### **EDUCATION**

Columbia University

Master of Science, Computer Science

August 2021 – December 2022

Cumulative GPA: 3.93/4.0

August 2018 May 2021

August 2018 – May 2021

Cumulative GPA: 3.92/4.0

# **Stony Brook University**

Bachelor of Science, **Computer Science**Bachelor of Science, **Applied Mathematics** 

# **SKILLS**

Software: C, C++, LabWindows/CVI, Python

Courses: Computer Graphics, Physically Based Animation, Computational Geometry, Competitive Programming

# **WORK EXPERIENCE**

## **J.G. Smith Associates Inc.** | Setauket, NY

Summer 2021

Software Development Contractor

Created LabWindows/CVI test tool for DC-DC converters.

# Applied Research Associates Inc. | Raleigh, NC

Summer 2020

Software Development Intern

• Refined the 3D model export pipeline to view subdivided tunnel facilities on a 3D representation of the earth.

# BitWize Corp. | Melville, NY

June 2019 – February 2020

Software Development Contractor

• Developed LabWindows/CVI application to monitor heater and actuator status for onboard deicing systems.

#### Stony Brook University

Fall 2020, Spring 2021

College of Engineering and Applied Sciences Computer Science Tutor

• Tutored students in data structures, discrete math, system fundamentals, and algorithmic analysis.

#### Cox & Company Inc. | Plainview, NY

Summer 2017, 2018

Software Development Intern

• Created LabWindows/CVI program to verify behavior of fuzzy signals of deicing controller in extreme temperatures.

#### PERSONAL PROJECTS

#### Virtual Rubik's Cube Solver – Python

- Utilized OpenGL for 3D simulations.
- Implemented Rubik's Cube solving algorithms, specifically CFOP.

#### Ray Tracer - C++

- Developed during computer graphics course at Columbia University.
- Includes Phong shading, shadows, antialiasing, reflection, refraction, mesh rendering, texture mapping, and BVH.

# Polygon Utilities – Python

- Interactive tool to build simple polygons.
- Utilities include ear clipping triangulation, convex hull algorithms, triangulation point sampling, and point visibility.

# **EXTRACURRICULAR ACTIVITIES**

#### **Competitive Programming**

September 2019 – December 2022

- Stony Brook University and Columbia University competitor.
- ICPC Greater NY Regional, 2021 3rd Place.
- Collaborated with team in weekly practice contests which leverage algorithmic problem solving.

# **ADDITIONAL**

#### Awards

- Columbia University Dean's List All Semesters
- Stony Brook University Dean's List All Semesters

Interests - Rock Climbing • Rubik's Cubes • Cycling