Michael Wolf-Sonkin

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EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Science — Expected Graduation: December 2022
Master of Science, **Computer Science** — Cumulative GPA: 3.81/4.0

Stony Brook University — August 2018 – May 2021
Bachelor of Science, **Computer Science** — Cumulative GPA: 3.92/4.0
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

- Helped students develop skills 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 and Visualizer – *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 – Present

- Stony Brook University and Columbia University competitor.
- ICPC Greater NY Regional, 2021 – 3rd Place.
- Collaborate 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