# DAVID GODFREY

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#### EDUCATION

### Astor Collegiate Academy

2009-2013

### ACHIEVEMENTS

- Regular high-reputation contributor to the StackExchange network for over a decade, with contributions helping over 10.3 million visitors.
- Successful hobbyist freelancer for 3 years, providing comprehensive software consultation and support for a wide range of technologies and fields such as web development, data science, and security.

## Projects

## Pathfinding Algorithm Visualizations Python

github.com/dgodfrey95/path-finding-visual

Python generated program to illustrate classical theoretical path-finding algorithms in steps. Includes Breadth First Search, Dijkstra, and A\*

# Retro Pong C++14, SFML

github.com/dgodfrey95/Pong

VS project implementing the classic arcade game Pong.

# Sudoku Solver Python

github.com/dgodfrey95/sudoku-project

Animates solutions to the natural generalization of Sudoku

## NBBO Tracker C++

github.com/dgodfrey95/NBBOTracker

C++ program used to acquire the tightest bid-ask spread (National Best Bid and Offer) of a security from a set of venues.

## WORK HISTORY

Freelance

New York, NY

August 2021 - Present

Software Consultant

- Designed a personalized study regiment for clients and tracked their progress with a cloud-based platform, making it easier to determine gaps in knowledge, the way they learn, and identify ways to improve their understanding.
- Provided online as well as in-person tutoring and project assistance in C, C++, Python, Java, and web development, improving client grades and confidence in Computer Science theory.

Manhattan, NY

Software Engineer Intern

May 2019 - August 2019

- Improved latency of core infrastructure components by 20% by utilizing and integrating memory-mapped interfaces.
- Developed unit-tested mdsplit applications with C++ to take live data from an AOE and saved pcap data
- Optimized gzip library and made it 23% faster when profiled.
- Integrated Gzip-Zip stream with SolarCapture to get data saved in Gzipped files, saving several minutes of manual processing time.

#### Treetop Adventure

Bronx, NY

November 2019 - August 2021

Adventure Park Staff

- Designed and optimized 4 pre-course safety orientation alternatives which lead to improved flow of guests throughout the park, facilitated the management of park-allocated time, and amounted to approximately 10% fewer burnout-related rescues while customers engaged in strenuous physical activity on the aerial courses.
- Co-produced and co-edited 3 promotional videos for the park that reached thousands across the metro-NY area, and generated more than \$10k in sales since the park's opening.

# References

Manuel Zambrano Software Engineer (manual.zambrano@gmail.com)

Michael Lehr Founder (michael@maystreet.com)

Nathan Addy Supervisor (naddy@wcs.org)