

# Gautom Das

☎ 240.444.0097 | ✉ gdas@umd.edu | 🌐 gautomdas | 👤 www.gautomdas.com

## EDUCATION

### University of Maryland, College Park

Aug 2020 – May 2024

*Bachelor of Science in Computer Science and Math | GPA: 3.7*

College Park, MD

- **Awards & Honors:** Honor's Student part of the Advanced Cybersecurity Experience and awarded the full **Banneker Key Scholarship** —a four year merit-based scholarship awarded to 0.02% of undergraduate students at UMD.
- **Coursework:** Algorithms and Data Structures, Object Oriented Programming I and II, Linear Algebra, Multivariable Calculus, Differential Equations, Statistics I and II, Probability Theory, Functional Programming, Real Analysis

## EXPERIENCE

### Yext

June 2022 – August 2022

*Software Engineering Intern*

Washington, D.C.

- Worked on Yext's Search back end development team to provide a customize AI search experience for companies.
- Helped migrate the old query suggest architecture, in **Java**, to a more horizontally scalable system with new features.
- Learned about distributed systems, message queueing, and databases by creating **MySQL** tables, making **RabbitMQ** exchanges to listen for updates, and adding new **gRPC** endpoints for more API functionality.
- Experienced the dev lifecycle using build tools (**Bazel**), version control with **Git/Gerrit**, and a scrum workflow (**Jira**).

### Capital One

June 2021 – October 2021

*Software Engineering Intern*

McLean, VA

- Worked on the second most starred —**at 873 stars**— public, **open source** repository: the Data Profiler, a **Python** library that allows for various file types to be opened and analyzed in Python as a **DataFrame**.
- Grew functionality to include input String and Byte streams at scale to the python library. Additionally, improved the handling of buffers in the back end.

### Immuta (Series D Startup)

June 2021 – August 2021

*Software Engineering Intern*

College Park, MD

- Hands on experience with full-stack development at a startup: a **AngularJS**, **NodeJS**, and **PostgreSQL** tech stack.
- Shipped multiple feature upgrades and bug fixes in the v2021.3 release.

### Assured Global Consulting LLC

January 2021 – December 2022

*Director of Marketing*

Washington, D.C.

- Founded an international education consulting company providing a-la-carte admissions services that partnered with **three international organizations** and individuals in **seven countries**.
- Managed the website that serves over 100 visitors a day built with **NextJS** using **Stripe** for payments.

## PROJECTS

### pyTorrent | A V1 torrent parser and client in OCaml and Python

- Wrote an **OCaml** executable to decode and encode, BEncoded ".torrent" files with additional functionality to provide a Sha1 info\_hash based on the original BitTorrent Protocol Specification.
- Implemented the peer protocol in **Python** and created an interface with the OCaml executable to find and manage peers
- Used **coroutines** to asynchronously(asyncio) handle the peer messages from the TCP protocol to download and build a file from multiple sources.

### Algoroller | A full-stack project demonstrating verifiable random numbers through roulette on the Algorand blockchain.

- Built a casino game using **PyTeal** to run on the **Algorand blockchain** that uses verifiable random numbers.
- Wrote the front-end using **React** in **Typescript** and wrote the back-end in **NodeJS**.
- Practiced using multiple APIs to interact with the blockchain and learned the principles of blockchain programming.

### blair3sat 501(c)(3)

- Founded and **led a team of 30 individuals** focused on developing, funding, and launching a cube satellite project.
- **Raised over \$10k** in funding and **published** in the *AIAA Conference on Small Satellites*.

## SKILLS

**Languages :** Java, Python, C, OCaml, SQL, Rust, JavaScript (& TypeScript), C++, Go, Solidity, Bash, Ruby

**Tools/Frameworks :** Git, Docker, Tensorflow/Keras, PyTorch, Pandas, React.js, Node.js, UNIX (& Networking)