Colin Graydon

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SUMMARY

Soon-to-be graduate in computer science and mathematics with real-world experience engineering back end systems and managing infrastructure. Demonstrated ability to design, implement, and optimize solutions using modern technologies.

EDUCATION

Bachelor of Arts in Computer Science, Bachelor of Science in Mathematics

Minor in Economics · Georgetown University · Washington, DC · 4.00 in Computer Science

- · Expected graduation December 2024.
- · First Honors student in Junior and Senior year.

EXPERIENCE

Backend Engineer

Ascend Meditations

March 2024 - Present, Washington, DC

- Architected and managed scalable backend systems using Google Cloud Platform's serverless functions with Firebase and RabbitMQ on a Kubernetes cluster, enabling autoscaling of Azure text-to-speech endpoints to handle up to 2,500 concurrent requests.
- Engineered and patented an NLP algorithm utilizing reinforcement learning, supervised, and unsupervised learning, resulting in a 12% increase in user content rating with large language models (LLMs), employing Python libraries like NLTK and TensorFlow.
- Implemented a comprehensive paywall system for the Expo application, authored robust authentication logic, and deployed the application to both the App Store and Play Store via a CI/CD pipeline.

Full Stack Developer, Intern

Amari Dating

August 2023 - March 2024, Washington, DC

- Developed an MVP for a dating app using Flutter, leading an agile team to deliver a highly functional and intuitive product. Utilized Dart to write efficient and maintainable code.
- Engineered a user-matching algorithm using Python and scikit-learn, enhancing match accuracy by 11% and improving user satisfaction.
- · Implemented live chat and direct messaging features using Firebase's Realtime Database and Cloud Firestore.

INVOLVEMENT

Chief Technical Officer

Georgetown University • Hoya Devs • May 2023 - August 2024

- Founded Georgetown University's software development club as CTO, leading the club's technical initiatives for 7 development teams and conducting code reviews to ensure timely delivery of code to clients.
- Created and taught 3 month course to mentor over 30 junior developers, focusing on modern web development essentials including JavaScript/TypeScript, HTML, CSS, and React/React Native, along with cloud engineering and deployment.

PROJECTS

simplifystudying.com

simplifystudying.com • January 2022 - May 2022

- Developed a full-stack learning tool using TypeScript, microservices, and server-side rendering, with a backend API in Node.js, GraphQL, and TypeORM, and a frontend using React and Next.js, deploying via Kubernetes to an EC2 cluster.
- Designed and exposed a REST API using Node.js, integrating it with a GraphQL endpoint via Apollo Server, enhancing data retrieval flexibility and streamlining frontend-backend interactions and reducing render time by 22%.

SKILLS

Languages: TypeScript/JavaScript, C++, Python, Java, Rust

Tools: Kubernetes, Docker, AWS, GCP, Node.JS, React, Firebase, Postgres, GraphQL, NumPy, Pandas, TensorFlow, NLTK, Scikit-learn

CERTIFICATIONS

Certified Kubernetes Administrator (CKA)

Linux Foundation • 2023

AWS Solutions Architect Associate (SAA)

Amazon · 2023