Malay Agarwal

Arlington, VA | TS/SCI with Polygraph

Software engineer finding enjoyment with full stack, embedded programming, and creating tools that are mission-critical.

Work Experience

Solutions Engineer | C3.ai | February 2025 - Present

- Interfaced directly with clients to work on generative AI solutions and implementation.
- Developed and deployed a full-stack government ATO assistance tool in 12 weeks, supporting both internal usage and external client needs, writing 90% of the codebase.

Army Cyber Officer | 91st Cyber Brigade | May 2023 – Present

- Led technical planning and mission preparation for a 20-person cyber team, developing repeatable processes that increased readiness before mission mobilization.
- Managed cross-functional team through complex technical training events, coordinating between intelligence, cyber, and operations personnel.
- Assisted with Battalion-level operations and training, presenting regularly to higher leadership in the S3 shop.

Software Engineer | *Booz Allen Hamilton* | May 2024 – February 2025 Junior Software Engineer | June 2023 – May 2024

- Led technical architecture and development of greenfield Air Force modeling & simulation platform from concept to first customer deployment, building a no-code environment that reduced mission planning time from weeks to hours.
- Architected migration of Al2C logistics scheduling platform from proof-of-concept to being able to support INDOPACOM deployment with future expandability.
- Spearheaded technical architecture decisions that accelerated development velocity, including implementing strict linting and type safety, establishing microservice patterns, and creating shared infrastructure-as-code templates.
- Built trusted relationships with stakeholders through clear technical communications, leading to successful capability demonstrations and program milestone approvals.

Research Intern | NASA | July 2022 - August 2022

- Collaborated on a pivotal project involving UAV operations in the Aleutian Islands, providing critical support to NOAA for marine life monitoring through aerial imaging and scanning.
- Developed system to monitor historic ship data in area of operations and signify trends to aid UAS/UAV missions.
- Addressed and resolved icing challenges during flight, demonstrating problemsolving acumen and technical expertise in adverse conditions.

Additional Projects

Algorithmic Trading Systems | March 2020 - August 2022

- Live traded autonomously on stock and crypto markets using Python, Go, and Docker handling over 1000 transactions daily.
- · Optimized buy/sell signals based on mathematical indicators and strategies.
- Efficiently processed large data and backtested for accurate results.

Education

Penn State University | July 2019 - May 2023

B.S. in Computer Science and commissioned as a 2LT in the Army

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Skills

Programming Languages Python, Go, C, TypeScript, JavaScript, React, SQL, Rust

Tools

Docker, Git, Linux, Digital Ocean

Interests

Powerlifting, running, skiing, video games, vim enthusiast

Current Learning

Creating an autonomous tethered multidrone system, using PX4 and a Raspberry Pi.