Adithya Anand

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Education

- **MS, Computer Engineering** *Sep '21 – Mar '23*
  University of California, San Diego
  Relevant Courses Planned: *GPU Programming, Principles of Computer Architecture, Operating Systems, Parallel Programming, Distributed Systems, Advanced Compiler Design, **Computer Architecture's Software Perspective***

- **B.E. (Hons.), Electrical and Electronics Engineering** *Aug '15 – Jul '19*
  Birla Institute of Technology & Science (BITS), Pilani *GPA: 8.63 / 10.00*
  Relevant Courses: *Object Oriented Programming, Real Time Systems, Software for Embedded Systems, **Computer Architecture***, **Computer Programming***, Microprocessors & Interfacing*

* acted as a Teaching Assistant for the mentioned courses

Technical Skills

Technologies: AWS Services – DynamoDB, EC2, SNS, SQS & Cloudwatch
Frameworks & Environments: Git, Spring, JUnit, Selenium, Agile Scrum, IntelliJ IDEA IDE, Unix, VIM
Programming Languages: Bash, Java, JavaScript, C++, BlueSpec SystemVerilog, Verilog

Industrial Experience

Amazon: Software Development Engineer - 2 *Aug '19 - Sep '21*
- Designed, implemented and deployed a web application **built to scale up to 120K transactions per second with <0.001% errors**, and has **confirmed yearly savings of $20.36MM**. This, along with multiple Engineering Excellence initiatives **led to my promotion to SDE - 2 in Q2 '21**.
- Engineering Excellence initiatives: Prevented Denial of Service scenarios, **improved fleet - wide host level metrics by an average 11.2%** by optimizing logging & tuning Garbage Collectors of legacy systems.
- Won the **Amazon Fulfillment Technology: Master of Delivery** award in Q3, 2020 for consistently designing and deploying a highly available and scaled application worldwide.
- Led the design & software changes in Amazon Fulfilment Technology for making our web applications completely accessible for blind and low vision warehouse associates**,** goal publicly tracked here.
- Implemented the Scrum Agile Framework as my team's Scrum Master from Feb 2020 - May 2021.
- Mentored 2 two-month interns, **both of whom received Pre-Placement Offers** based on their work.

Invento Robotics: Software Development Intern *May '17 - Jul '17*
- Built a centralized web interface controlling the motor and maintenance functions of the startup's humanoid, Mitra.
- Created database solutions for logging Mitra's diagnostic data to help in troubleshooting.

Research Experience

School of Computing, NUS: Visiting Researcher *Jan '19 - Jun '19*
- Designed and synthesized hybrid processors in Bluespec SystemVerilog HDL to mimic the energy efficiency of an In-Order Core while having the processing efficiency of an Out-Of-Order Core.
- Automated the above HDL using bash scripts for extracting and building on AWS FPGAs, interconnecting S3 buckets, Elastic File Systems and split compilation between C4 (compute-centric) and F1 (generic) instances.

Academic Projects

Real Time Sensor Analytics for Advanced Process Control *Jan '18 - May '18*
- Designed & implemented an IoT scalable interface to gather data from sensors installed at a waste – water treatment site. Worked on its backend framework built with Flask & GCP's Firebase.
- This project was sponsored by the Bill – Melinda Gates Foundation.

Student's Welfare Division Web Application *Dec '17 - Apr '18*
- A web application for an administrative portal used officially by the students of BITS Pilani, backed by the institute.
- It was built on the django framework, with Python & JavaScript. The link to its repository can be found here.