

Tharun Kumar Reddy Polu

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EDUCATION

UNIVERSITY OF MARYLAND

M.ENG. IN SOFTWARE ENGINEERING
December 2024 | College Park, MD
A. James Clark School of Engineering
GPA : 3.9 / 4.0

JNTU, HYDERABAD

**B.TECH IN ELECTRONICS AND
TELECOMMUNICATION ENGINEERING**
July 2021 | Hyderabad, India
Vignan Institute of Technology and
Science, Deshmukhi
GPA : 3.5 / 4.0

LINKS

Github:// [TharunKumarReddyPolu](#)
LinkedIn:// [Polu Tharun Kumar Reddy](#)

COURSEWORK

GRADUATE

Software Engineering
Software Design & Implementation
Data Structures and Algorithms
Reverse Software Engineering
Hacking of C Programs & UNIX Binaries
Fundamentals for Artificial Intelligence
and Deep Learning Framework

UNDERGRADUATE

Computer Programming in C
Java Programming
Computer Networks
Switching Theory & Logic Design

SKILLS

PROGRAMMING

Over 5000 lines:

Python • Java • C/C++ • Javascript •
HTML • Git • SQL • OOP • Linux

Over 1000 lines:

Docker • Kubernetes • BASH • GCP •
AWS • JSON/XML/YAML • Pandas

Familiar:

Design Patterns • Distributed Systems •
CI/CD • Jenkins • Ansible • IPv6/IPv4

CERTIFICATIONS

PCAP: Programming Essentials In Python
Microsoft Certified : Azure Developer
Associate
Postman API Student Expert
AWS Cloud Practitioner Essentials

EXPERIENCE

UNIVERSITY OF MARYLAND | GRADUATE RESEARCH ASSISTANT - 1

April 2023 – Present | College Park, MD

- Collaborated with a 6-member engineering team in weekly updates to a data pipeline system, supporting 22,500 students and 14,000 employers, optimizing over 10,000 lines of Python code for a 45% performance boost.
- Migrated 36,500 records, reducing manual data entry by 80% and improved data accessibility and reporting by 65% based on feedback from the data analytics team

MAJOR LEAGUE HACKING | SOFTWARE ENGINEERING PREP FELLOW

March 2023 – April 2023 | Remote

- Developed a ReactJS and NodeJS-powered weather-based trip planning web app utilizing the OpenWeatherMap API, earning a commendable 4.7/5 endorsement from mentors.
- The core application served over 30,000 users, featuring real-time weather data modules for 75+ locations, enhancing travel efficiency by 20% with personalized recommendations and packing tips.

TATA CONSULTANCY SERVICES LTD. | SOFTWARE ENGINEER

July 2021 – December 2022 | Hyderabad, India

- Architected multiple REST APIs and backend web services from the ground up employing Java and Spring which imports data from over 30 insurance systems, processes required information for end users and 200+ brokers. In production.
- Collaborated with QA and support groups to debug backend software-related issues which reduced the downtime by 30%
- Created and executed over 50 test automation scripts using Tricentis Tosca, Guidewire, Selenium, TestNG, decreasing manual testing efforts by 70%.

PROJECTS

GRADUATE MARKET PLACE | PYTHON, HTML, CSS, JAVASCRIPT, TAILWINDCSS, DJANGO, SQLITE DB

February 2023 – June 2023 | Github

- Developed and deployed an innovative online marketplace for over 10,000 students, enabling seamless buying and selling of used/ new products and fostering a vibrant campus economy.
- Raised transactions by 50%, fostering a sustainable student economy.

LIBRARIAN BOT | HTML, CSS, PHP, SQL, XAMPP SERVER, VS CODE

February 2021 – June 2021 | Github

- Crafted a user-friendly web application to execute and observe daily transactions in the library for students and librarians.
- Implemented automated book borrowing and returning capabilities, streamlining library transactions, enhancing user experience for over 1500 students and 20 librarians while decreasing manual work by 80%.

ACHIEVEMENTS

2022	top 50/4500
2021	National
2021	top 500/40000*
2019	1 st /110

Microsoft more power to you, won \$50 Amazon Voucher
Cracked TCS Digital Cadre among 150000+ employees
Microsoft Get Set Azure Hackathon
IEEE Xtreme Coding contest