## THARUN PALLA

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#### **EDUCATION**

North Carolina State University, Raleigh, North Carolina

Aug 2021 - Dec 2022

Master of Computer Science - GPA: 4.0/4.0

Coursework: Automated Learning and Data Analysis, Design and Analysis of Algorithms, Computer Networks

Visvesvaraya National Institute of Technology, Nagpur, India

Jul 2014 - May 2018

Bachelor of Technology in Computer Science - GPA: 7.97/10.0

Coursework: Data Structures and Program Design, Software Engineering, Operating Systems, Network Security

#### **TECHNICAL SKILLS**

**Programming Languages**: Java, Python, C++

Web Technologies: HTML, CSS, JS, ReactJS, React Native

Frameworks: Java-Spring (Boot, Batch, Cloud, Data, Security), Django, Flask, DropWizard

**Databases:** Oracle DB, MySQL, MongoDB

ETL Tools: IBM Tivoli Workload Scheduler, IBM DataStage

**DevOps Tools:** Docker, Jenkins, Hashicorp (Vault, Consul), Cloudera Kafka, ActiveMQ, AppD, ELK

Other Technologies: Amazon Web Services (AWS), OpenShift, GraphQL

## WORK EXPERIENCE

### Software Engineering Intern, Zuora - Raleigh, United States

May 2022 - Present

- Built the front-end for creating and managing custom events and custom scheduled events in the Zuora UI with React, GraphQL and Typescript, allowing customers to self-serve rather than managing events via API.
- Developed campaign management out-of-the-box feature using React, GraphQL and Spring framework to automate identified churned customers and send marketing communications focused on win-back offers.

## Student Research Programmer, NCSU - Raleigh, United States

Jan 2022 - May 2022

 Developed a cross-platform software to automate gathering rainfall grid data from National Weather Service and converting the data to DSS format with Python GUI framework Tkinter and Vortex data processing utility, reducing several hours of manual work to minutes.

#### Application Developer, Barclays US - Pune, India

Aug 2018 - Aug 2021

## Payment Platform Modernization

- Re-architected and migrated legacy monolithic payment platform to microservices. Applied 12-factor app, Test Driven Development, and CICD methodologies to develop, containerize and deploy the applications on OpenShift.
- Improved the lifecycle of the application deployment process by leveraging Spring-Boot, Hibernate, and other DevOps tools to reduce production release time by 70%.
- Enhanced features in credit card payments that minimized fraud, money laundering risk, and delays in posting payments. Reduced call volume by 500k in 12 months after Go-Live, saving ~1.3M\$.

## Payment File Confirmation and Settlement

- Developed applications using Spring Boot and Quartz scheduler to automate vendor payment confirmation process by generating alerts for SLA breaches, resulting in minimized delinquency risk and reduced customer complaints by 25%.
- Created automated processes using Spring Boot, Spring Batch, and Tivoli Workload Scheduler to reduce manual errors, thus slashing processing time associated with payment settlements.

#### Software Development Intern, IBuild Innovation Limited - Hyderabad, India

May 2017 - Jul 2017

- Developed the frontend for IBHubs Startup School program with ReactJS. Developed cross-platform mobile applications for Android and iOS using Redux and Mobx state management in React-Native.
- Built several reusable custom components for HTML forms to develop applications in React and React-Native efficiently.

### **ACADEMIC PROJECTS**

## Computer and Network Security Project, NCSU - Spring 22

Feb 2022

• Implemented encrypted file transfer with AES, Diffie-Hellman Key Exchange and performed an on-path attack utilizing python network sockets and PyCryptoDome.

## Personality Detection with Five-Factor Model, NCSU - Fall 21

Sep 2021

• Developed an interactive quiz web application to collect data and predict personality using unsupervised KMeans clustering algorithms.

# Cloud Computing Project (AWS), VNIT Nagpur

Oct 2017

- Modeled an application, automated its lifecycle, and deployed on OpenStack (an open-source cloud platform) with a cloud orchestration tool Cloudify.
- Developed a student registration application in Java and deployed it using Elastic Beanstalk. Integrated the application with both Relational Database (AWS RDS) and No SQL Database (AWS DynamoDB).