

ADITHYA RAM BALLEM

2450 Camellia Ln NE, Atlanta, GA – 30324

+1(947)777-5933 | adithya.ram.ballem@gmail.com | [linkedin.com/in/adithyaramballem](https://www.linkedin.com/in/adithyaramballem) | github.com/adithya-ram

CAREER OBJECTIVE

Highly skilled, experienced engineer with exceptional analytical intellect and desire to resolve global problems. Computational engineering made me perseverant to learn, attune to broad technical domains and expeditiously deliver robust, flexible and impactful solutions. With such strong aspirations, I seek an internship at your organization to undertake technology's most significant challenges and make an impact on people around the world.

EDUCATION

Georgia State University, Atlanta – GA Aug 2022 – Dec 2024 Expected
Master of Science in Computer Sciences – Thesis **CGPA: 4.23/4**

Jawaharlal Nehru Technological University, Hyderabad – IND May 2017
Bachelor of Technology in Computer Science & Engineering **Percentage: 87/100**

TECHNICAL SKILLS

Programming languages: Objective-C, Swift, SwiftUI, Perl, Shell, Python, C/C++, Java, JavaScript, MATLAB, SQL, HTML, CSS

Software Technologies: iOS and Android Development, Xcode, Node, Express, Flask, JAX-RS, Angular, Jasmine and XCUITests, CI/CD, Database, .Net, Web, Cocoa pods, Bootstrap, Rest API's, Architecture Design, Framework Development

ACADEMIC COURSEWORK

Advanced Digital Image Processing, Artificial Intelligence, Data Science, Advanced Machine Learning, Advanced Algorithms, Approximation Algorithms, Advanced Deep Learning

CERTIFICATIONS

Oracle Certified Java developer
Indian Institute of Technology NPTEL Data Structures merit certification
Indian School of Business Technology Entrepreneurship Programme

ACCOMPLISHMENTS AT WORK

Voted Best Employee – 2021-22	Individual Excellence Award – Q1 2020	National Merit High School – 2011
Team Excellence Award – Q2 2020	Individual Excellence Award – Q1 2019	
Team Excellence Award – Q2 2017	Individual Excellence Award – Q1 2018	

WORK EXPERIENCE

5+ YEARS

Associate Technical Lead

August 2021 – June 2022

Kony Inc (acquired by Temenos AG) – Hyderabad, IND (Headquarters – Austin, TX)

- Roles and Responsibilities: Research and Development around low code multichannel application platform for iOS Frameworks subdivision. Brainstorm, support, review and collaborate with team, streamlining to achieve creative and quality engineering deliverables for effortless universal JavaScript application development experience.
- Developed configurable multiscreen real estate declarative layout engines, reusable across applications and many diverse use cases such as extensions namely WidgetKit, Share, WatchKit etc., transforming universal JavaScript drag/drop low code workflows into native SwiftUI views and Storyboards. These Perl scripted systems integration encapsulates native complexity, reducing release learning adaptation and development overhead on the customer by a remarkable 100%.
- The high scalability of system was extended to devise a generic product strategy, allowing cloud workflows to produce dynamic server-driven applications, projecting trimmed costs of customer products test and deployment lifecycle by 50%.
- Solved legacy product bugs and numerous high-severity customer issues with CSAT Score > 98% without any defective regression leaks and average tickets aging < 3 days.
- Developed and managed CI-CD build pipelines for iOS frameworks and platform integrations. Actively led the team through sprint release build processes required plugins, with thorough assessment over QA and Production environments.

Senior Software Development Engineer

June 2019 – August 2021

Kony Inc (acquired by Temenos AG) – Hyderabad, IND (Headquarters – Austin, TX)

- Transitioned iOS core build system incorporates XCFramework packaging design with Dynamic Xcode project Plist manipulations, permitting comprehensive intra cross platform builds, profiting company's marketing business with this Zero – Cost strategy and reach out to new macOS customer base with added benefit of multi-platform deployment.
- Guaranteed consumer privacy compliance, by enabling source code protection, monitoring tamper actions and defense from attacks using Integrity checks via RSA, SHA algorithms and EnsureIT protection frameworks.
- Multi-threaded system development with multi modal objects between iOS lifecycle and unidirectional communicative JavaScript runtimes through medium of proxy observable interfacing and API modeling. Ensured concurrent resources access across parallel runtimes with necessary mutexes, semaphores and reference counting techniques.

- Ushered for adaptive layout and led teams across different channels like android, windows, etc. to develop layout engine adhering to Bootstrap design paradigm, future proofing application span on foldable display, split window multitasking.

Software Development Engineer

March 2018 – June 2019

Kony Inc – Hyderabad, IND (Headquarters – Austin, TX)

- Research and Development around multi-channel platform called Kony Quantum, a product competitively used as Flutter, React, Xamarin. Engineering around universal application architecture of modular software development kits, conceptualizing to establish a nonexistent Object-Oriented principles into JavaScript and achieve consistent product usability across native iOS, Android, Windows, Mac, Web apps.
- Developed Java version control system, automating JavaScript, JSON upgrades for customer applications branched out from different release versions of companies prepackaged products such as digital banking platform suite. Operational client server model using AngularJS and Java JAX-RS on top of this version control system offers deployable and effortless GUI solution for customers to track and apply syntactical differences for a seamless functional upgrade.
- Upskilled entire company platform users and travelled to developer conferences on our new model-driven architecture and its design capabilities. Subsequently reviewed and oversaw architectural development of company's product suite and customer implementations to extract maximum scalability through JavaScript object-oriented principles.

Associate Engineer

March 2017 – March 2018

Kony Inc – Hyderabad, IND (Headquarters – Austin, TX)

- Collaborative constructed VIPER architecture platform, offering customers MVC modeled framework for developing universal JavaScript applications. Inducing Object Oriented principles into JavaScript, indistinguishable to TypeScript compilation, ensures class prototyping, inheritance relations, super keyword reference to access parent objects are all unique non-baked in features of JavaScript, stimulating modular path for application extensibility and upgradability.
- Devised low code strategy for populating the UI elements with data source models and their object relational mappings, thereby automating Presentation - View model bindings and shortening development time.

ACADEMIC PROJECTS AND RESEARCH EXPERIENCE

Graduate Research Assistant

December 2022 – Present

Center for Translational Research in Neuroimaging and Data Science (TReNDS), Atlanta – GA

- Tri-Institutional Research Center – Georgia State University, Georgia Institute of Technology and Emory University
- Statistical data driven analysis on complex human brain networks with fMRI data, associating independent component analysis results to observe and model differences between schizophrenic, bipolar disorders from healthy patients.

Graduate Teaching Assistant

August 2022 – April 2022

Georgia State University, Atlanta – GA

- Planning, assisting in coursework of Fundamentals of Data Science and Advanced Image Processing courses. Involved with self-learning course, curating assignments, verifying project research work, and assessing student performance.

Coursework Projects

August 2022 – Present

Georgia State University, Atlanta – GA

- Signal synchronization optimization for Rapid Transit – Novel Primal Dual Linear Programming approach, alternative Set Cover Approximation Algorithms to solve NP hard road traffic flow problem, efficiently synchronizing signals along continuous pathway at intersections, maximizing the traffic movement, and ensuring less stoppage time for vehicles.
- Image restoration with adaptive local noise reduction filter using pixel adjacency relation – Image processing technique of precise noise assessing model factoring in distribution statistics of m-adjacency connected components.
- Save Bees Save Planet, Home pollinators an ideal green playland using machine intelligence – Approach to understand human impact around geography with spatial information opens possibilities in improving agriculture and vegetation.

EXTRACURRICULAR PROJECTS

IEEE Signal Processing Cup 2023 Feb 2023 – April 2023

- Organizer for SP Cup 2023 with challenge of solving real world problem of Psychosis Classification.

Kony Inc – Hyd, IND (HQ – Austin, TX) October 2019

- Developed futuristic augmented reality Banking experience using AR objects using facial recognition.

Taurus Instruments UAE January 2022 – March 2022

- Supported leading global surgical apparatus business by establishing digital front with angular web app, TypeScript, Bootstrap, Python Flask.

Indian School of Business

Technology Entrepreneurship Programme August 2016

- Affordable agricultural crop preservation prototype monitoring consistent usage of fertilizer, pesticides.

PUBLICATIONS

- Adithya Ram B *et al.*, “Multi Spatial Scale Functional Network Connectivity and Its Application in Psychosis”, 2023 *IEEE 20th International Symposium on Biomedical Imaging (ISBI)*, Cartagena, Columbia
- Georgia State University, CS Demo Day 2023 – Presented poster on Human brain fMRI data analysis, understanding complex brain networks, decoding the connectivity within, and categorizing healthy brain from psychosis condition.
- Georgia Institute of Technology, Center for Advanced Brain Imaging 2023 – Presented poster on first clinical application on multi scale spatial ICN template, constructing canonical networks of human brain to model psychosis.

INTERNSHIP EXPERIENCE

Defence Research and Development Organization, Govt. of India January 2017 – April 2017

- Established secure file storage cloud by developing an inhouse cryptography solutions involving DES and .Net.

SmartBridge, IOT development June 2016 – July 2016

- Centralized real time risk analysis monitoring system with Arduino microcontroller using ZigBee mesh network.

STRENGTHS

Resolute and Hardworking, Excellent problem-solving and mental ability, Adaptable to program in multiple languages, Outstanding debugging skills and keen eye for following code across multithread systems, Effective work in fast based environments

SKILLS

Adept Learner, Efficient work prioritization, Creative, Smart, Adaptable, Resourceful, Productive, Leadership, Approachable, Knowledgeable and Collaborative

EXTRACURRICULAR ACTIVITIES

Athlete, Sportsman
AIESEC India
Street Cause NGO
Google Student Club