SUJIT POUDEL

Seattle Area, WA, 98075 ● 859.248.2311 ● sujitpoudel123@gmail.com

- Accomplished and motivated Software Engineer with primary focus on mobile with more than 10 years of experience in building robust, scalable, and world-class set of solutions for back-end and front-end mobile, Edge and IoT Computing devices, occasionally integrated with Machine Learning and Artificial Intelligence, Release management, CI/CD pipelines, and create platform for big teams of developers to be the most productive versions of themselves
- Harvard Business School certified on Leadership principles, and Entrepreneurship Essentials to effectively lead teams and companies into successful ventures
- Versatile engineer with experience on Android, iOS, Machine Learning, AI, SDK development, and infrastructure development/maintenance
- Worked with small teams to large teams on dynamic, and ever changing environment to deliver changes ranging from minor things to large, infrastructural, and architectural to drive high impact to business
- Built all the software and firmware related things as the Principal engineer for Teddy Robotics
- Brought multiple projects into completion from conception
- Worked on 14 major projects for mobile (Android mostly) at Compass, large and small from replacing a framework, to rearchitecting the entire app to use Jetpack components
- Started and finished Android and IoT/Edge SDK with Machine Learning models at Clarifai
- Led and presented a high value machine learning projects for the DARPA and the Pentagon
- Leveraged strong analytical and problem solving expertise to serve as project coordinator, ensuring compliance with all established time schedules, collaborating with other key employees to quickly identify and resolve issues
- Published multiple papers in significant conferences (IEEE, LA-SiGMA, PhyCS)

CORE SKILLS AND COMPETENCIES

- iOS Engineer
- Android Engineer
- SDK Development
- Edge computing
- IoT development
- Infrastructure Engineering
- Biometric Security
- CI/CD tooling and automation
- Build Systems
- Swift, C++, Kotlin, Java, Gradle
- Algorithms
- Mathematics
- Machine Learning
- Artificial Intelligence

PROFESSIONAL EXPERIENCE

SZNS.IO (Apr 2022 - Present)

Part Time Contractor (Senior Engineer)

- Work on frontend and backend of Web3, react app with blockchain technology to add features
- Prototyping and building a new react native app for the company

BITRISE (Apr 2022 - Present)

Senior Mobile Engineer - Full time

- Work on mobile experts pillar to guide company on mobile engineering front
- Build new tools to help out other mobile engineer build their best CI/CD pipeline
- Work on innovative ideas and projects to scale the products at the company
- High level architectural discussions, and roadmapping with the team

COMPASS (Jun 2019 - Apr 2022)

Senior Mobile Engineer

- Switched to become iOS engineer and worked on projects, but not limited to

Timeline	Project
Nov 2020	Distribute all iOS modules are binary to optimize development speed
Dec 2020	Improve internal command line tool, Clide, by adding many commands
Feb 2021	Make cocoapods work on local development pod as well as binary
April 2021	AB Stable across Xcode and Swift versions
Jun 2021	Adopt new Xcode and xcframeworks
Nov 2021	Deprecate Cocoapods, use Swift Package Manager
Dec 2021	Boot Time improvements and tracking
Feb 2022	Clide Project Manager as Dependency management for modular architecture

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Timeline	Project
Feb 2022	iOS Foundation app with core components
July 2019	Measuring laginess on iOS listings
Oct 2019	Investigate and implement kotlinx-serialization
Sept 2019	Replace unit testing framework for Android in favor of idiomatic kotlin unit testing
Nov 2019	Kotlin-multiplatform as possible option to code-share between Android and iOS
Jan 2020	UI Automation framework for Android
Dec 2019	Encryption and Caching for Android
Feb 2020	Migrate the Android code to use Jetpack Components (viewmodels, navigation)
Mar 2020	Anko to XML conversion

TEDDY ROBOTICS (March 2020 - Nov 2021)

Principal Engineer

- Helping to establish the company with all their software needs
- Architect and build mobile applications (Android and iOS) to teach 6+ years old programming by controlling robots
- Made all software related roadmaps (Android iOS, desktop, firmware), design, architect, and decisions

CLARIFAI (Nov 2017 - May 2019)

Senior Software/Android Engineer

- Joined Clarifai as the only Android Engineer to port Clarifai tech to android powered devices
- Built the Internet of Things/Edge (IoT) SDK for various hardwares like raspberry PI and security cameras with my team
- Designed and created the build system/toolchain and infrastructure for Edge SDK
- Seeded the Android AI SDK project and went on from non-existent to multiple release phases within 7 months period
- Build infrastructure to make Android SDK work with Clarifai AI models
- Built and released Clarity from Clarifai on Play Store
- Setup and built continuous integration with jenkins

MAKERBOT (Nov 2016 - Nov 2017)

Software Engineer + Mobile AppEngineer

- Inherited all sets of USB driver code, along with middleware layers to find and fix problems
- Concurrently held software engineering as well as mobile app engineering positions
- Responsible for full mobile development & maintenance for both iOS and Android
- Learned Objective-C for iOS development very quickly and started adding features in no time
- Inherited large Android and iOS code base, and refactored with modern design principles
- Created testing standards, wrote unit tests, setup CIs and automated testing with Jenkins
- Built critical internal apps related decisions for MakerBot mobile set of apps

SYRACUSE UNIVERSITY & LOUISIANA TECH UNIVERSITY (May 2011 -August 2016)

Research Assistant (DARPA, NSF)

- Did the work and presented the work with biometric security at DARPA, and at the Pentagon.
- Identifying users from commercial grade EEG devices and get a neurological based human computer interface
- Breached swipe based authentication using humanoid robot Nao (Published by IEEE BTAS 2015).
- Introduced fNirs as a new modality for biometric authentication (Published by IEEE BTAS 2015).
- Developed & designed plethora machine learning systems in C++, R, and Java.
- Developed machine learning algorithms from scratch for perceptron networks, Random Forrest, and SVM
- Merged mobile technology with Linux server & humanoid robot using 10+ programming platforms.
- Assisted students working on PhD dissertations.
- Designed new scripts for automating large data processing in molecular electronics.
- Improved efficiency of LONI supercluster by 200% by developing and improving scripts (VBScript).
- Simulated quantum charge transport (Atomistix & siesta) applying specialized software packages.
- Applied Atomistix, TransSIESTA (C++), SIESTA (C), VBScript, HPC, Linux Shell, Git, Gitlab, Perl, and Python

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EDUCATION

SYRACUSE UNIVERSITY, Syracuse NY — August 2014 – August 2016

M.Sc. in Computer Science

LOUISIANA TECH UNIVERSITY, Ruston, LA — August 2010 – August 2014

B.Sc. in Computer Science ● B.Sc. In Mathematics ● Minor in Physics

PUBLICATIONS

1. Poudel, Sujit; Serwadda, Abdul; Phoha, Vir V., "On Humanoid Robots Imitating Human Touch Gestures on the Smart Phone," in Biometrics: Theory, Applications and Systems (BTAS), 2015 IEEE Seventh International Conference (http://www.btas2015.org) on , Sept. 8 2015-Sept. 11 2015
2. Serwadda, Abdul; Phoha, Vir V.; Poudel, Sujit; Hirshfield Leanne M.; Bandara, Danushka; Bratt, Sarah E.; Costa, Mark R., "fNIRS: A New Modality for Brain Activity-Based Biometric Authentication," inBiometrics: Theory, Applications and Systems (BTAS), 2015 IEEE Seventh International Conference (http://www.btas2015.org) on , Sept. 8 2015-Sept. 11 2015
3. Paudyal, Anjana; Beach, Benjamin; Poudel, Sujit; Moreno, Juana; Ramachandran, Bala; Derosa, Pedro,"Effect of Molecule-Contact Distance and Coordination Geometry of Clip Atom in IV characteristics of Thiophenes containing Cobalt Bisdicarbollide," (http://www.institute.loni.org/lasigma/reu/documents/papers2013/BenjaminBeach_Paper.pdf)
4. Hincks SW, Bratt S, Poudel S, Phoha V, Jacob RJK, Dennett DC et al. Entropic brain-computer interfaces using fNIRS & EEG to measure attentional states in a Bayesian framework. In PhyCS 2017 - Proceedings of the 4th International Conference on Physiological Computing Systems. SciTePress. 2017. p. 23-34
5. Hincks, Samuel W. ; Bratt, Sarah ; Poudel, Sujit ; Phoha, Vir ; Jacob, Robert J.K. ; Dennett, Daniel C. ; Hirshfield, Leanne M. / Entropic brain-computer interfaces using fNIRS & EEG to measure attentional states in a Bayesian framework. PhyCS 2017 - Proceedings of the 4th International Conference on Physiological Computing Systems. SciTePress, 2017. pp. 23-34

TECHNICAL PROFICIENCIES

iOS, Swift, Android, Kotlin, Java, CI/CD pipelines, Bitrise, Ruby, Firebase, AppCenter, SDK Development, JNI, C++, Python, R, GIT, C, Linux, MySQL, JavaScript, PHP, HTML, CSS, OOD, Matlab, SVN, Naïve Bayes, Shell, adb, Robotics, Gitlab, Python