

AMIT PAUL

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SUMMARY

Senior Android Engineer with 6 years of experience at Samsung R&D, with a primary foundation in **Java Android development** — spanning the **Android SDK**, framework APIs (Activities, Services, ContentProviders, Broadcast Receivers), and deep browser feature work on Samsung Internet. Progressed from systems-level engine optimization inside the **Chromium/Blink Engine** — focusing on **rendering pipelines** and **IPC** — to overseeing **AI-driven feature development** for 400M+ monthly active users. Complements a Java-first background with growing **Kotlin** proficiency in green-field modules, **Jetpack Compose** UIs, and **Kotlin Coroutines** — a combination of Android SDK depth and modern language fluency that enables confident contribution across both legacy codebases and new architectures.

EXPERIENCE

Samsung R&D Bangladesh

Dhaka, Bangladesh

Lead Engineer

Mar 2025 – Present

- Overseeing the end-to-end delivery of the “Read Highlight Aloud” AI feature for Samsung Internet, coordinating cross-functional teams to integrate Samsung’s OneUI AI stack into the browser — serving **400M+ monthly active users**.
- Architected a flexible, interactive prompt system for AI-driven audio features using **Jetpack Compose**, enabling fully free-form UI movement and repositioning across Galaxy S-series flagship devices, directly improving accessibility scores.
- Overseeing the Sites Module for Samsung Internet Android, managing its stability and release cadence to uphold quality benchmarks across a global user base exceeding 400M monthly actives.
- Coordinating with product and QA teams to define technical requirements and review architecture proposals, ensuring AI feature rollouts align with performance SLAs measured across hundreds of millions of sessions.

Senior Software Engineer

Mar 2022 – Feb 2025

- Architected and developed a greenfield AI-driven advertising platform from scratch using **Kotlin**, **Jetpack Compose**, and **Dagger/Hilt** for dependency injection, integrating on-device activity-tracking models to serve contextually relevant content at scale.
- Engineered engine-side logic within the **Chromium/Blink Engine** (C++) to support Samsung Pass “Virtual View” and “Virtual Card” autofill, extending the **rendering pipeline** to surface secure, native-view credential suggestions — a capability requiring direct modification of Blink’s form-factor internals.
- Developed and launched the first standalone Password Editor for Samsung Internet Android, implementing biometric authentication with Android Keystore and designing the credential management flow end-to-end using **Kotlin Coroutines** for async secure storage operations.
- Coordinated Chromium “bringup” activities across major upstream merges, performing large-scale C++ refactoring within the **Blink Engine** and reconciling **IPC** interface changes to maintain Samsung-specific feature parity with open-source Chromium releases — impacting stability for 400M+ users per release cycle.

Software Engineer

Jan 2020 – Feb 2022

- Optimized the **Chromium rendering pipeline** (C++/Blink), diagnosing and resolving complex layout, compositing, and paint-phase bugs to improve frame stability and visual fidelity across Samsung Internet — a discipline that requires reading and modifying the engine source directly rather than working around it at the application layer.

- Supported engine stability initiatives with a focus on **cross-process communication (IPC)** between the browser and renderer processes, reducing race conditions and improving robustness under high-memory-pressure conditions on mid-range Android devices.
- Built foundational familiarity with Chromium’s multi-process architecture, establishing the systems-level expertise that underpins all subsequent feature and leadership work.

OTHER PROJECTS

WootzApp (Chromium-based) [GitHub] *C++, Java*

- Engineered an unfurling feature for Action URLs within the **Blink Engine**, replacing DOM elements with dynamic JSON data via a custom Extension API — demonstrating the ability to introduce novel browser behaviors at the engine level.

Epic Browser (Android) *C++, Java*

- Contributed to the “bringup” of NTP (New Tab Page) and proxy features for the privacy-focused Chromium-based browser, coordinating engine-layer integration across upstream Chromium **IPC** and **rendering pipeline** components.

Bank Statement Automation [GitHub] *Python*

- Developed an automation tool to parse and convert bank statements into structured CSV files, reducing manual processing time for financial data management workflows.

SKILLS

- **Languages:** Java, Kotlin, C++, Python, Bash
- **Android & Jetpack:** Android SDK, **Jetpack Compose**, **Kotlin Coroutines**, **Dagger/Hilt**, Android Keystore, Biometric APIs, ViewModel, LiveData
- **Browser Engine:** **Chromium**, **Blink Engine**, **Rendering Pipeline**, **IPC** (Mojo), Multi-Process Architecture, C++ DOM Internals, Extension APIs
- **Specialties:** Browser Internals, Engine-Level Debugging, AI Feature Integration, Mobile Security, Foldable/Form-Factor UI, Systems-Level Android Development
- **Tooling & Platforms:** Linux/Unix, Git, Gerrit, Android Studio
- **AI Development Tool:** Claude Code, Cursor, Cline, Codex — routinely used for design exploration, implementation, refactoring, and debugging across Project’s codebases

ACHIEVEMENTS & AWARDS

- **Samsung Software Competency (SWC) – Professionals:** Passed Samsung’s internal professional-level programming competency assessment, a rigorous evaluation of algorithmic problem-solving and software engineering fundamentals.

EDUCATION

Chittagong University of Engineering & Technology	Bangladesh
Bachelor of Science in Computer Science and Engineering	2015 – 2019
GPA: 3.44 / 4.00	

Government Haji Mohammad Mohsin College	Chittagong, Bangladesh
Higher Secondary Certificate (HSC), Science	2012 – 2014
GPA: 5.00 / 5.00	