Jake Palanca • Software Engineer

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SUMMARY OF QUALIFICATIONS

Database-focused developer working primarily with **Java (Spring Boot)**, **React**, and **SQL/MySQL**. I build secure, data-driven applications with strong backend architecture and persistence design. I also build *iOS apps* in **Swift/SwiftUI**.

EDUCATION

University of Georgia Graduation May 2026
Bachelor of Science, Computer Science 3.6 GPA

RELEVANT COURSEWORK

Software Development | Computer Architecture | Operating Systems | Systems Programming | Computer Networks | Database Management | Web Programming | Artificial Intelligence

TECHNICAL SKILLS

Languages: Java, JavaScript, Swift, C, Python
Frameworks: Spring Boot, React, SwiftUI
Databases: MySQL, MongoDB
Tools/Cloud: AWS, CI/CD, REST APIs, Docker, Git, JUnit

SOFT SKILLS

Problem-Solving | Team Collaboration | Critical Thinking | Time Management

RELEVANT PROJECT EXPERIENCE

Cast Browser, *Personal Project (Ongoing)*

- Built a *WKWebView*-based media detection pipeline using *JavaScript* injection to identify HLS/DASH resources and capture required request metadata in real time.
- Integrated *MobileVLCKit* as a fallback playback engine and implemented a local *proxy* layer to normalize/forward streams for reliable iOS playback.
- Implemented a unified casting flow across *AirPlay* and *Google Cast*, using a local HTTP relay to provide authenticated playback to devices when headers/tokens are required.

Cinema Booking Website, *Class Project*

- Shipped auth suite with token-validated flows; *bcrypt*-hashed passwords and *JSON web tokens* with expiry/invalidations.
- Tokenized simulated payment data and *encrypted* sensitive columns at rest using a JPA *@Convert*.
- Implemented seat selection, inventory holds, and admin tooling; added *input validation* and *basic rate limiting*.
- Collaborated on a five-person *Agile* team; contributed to sprint planning, standups, and reviews.

TCPdump Python CLI Parser, *Class Project*

- Reconstructed hop-by-hop paths by matching outbound *TCP* (id/TTL) to *ICMP* “time exceeded”/“destination unreachable” replies.
- Streamed multi-GB traces with a buffered generator pattern to keep memory *O(1)*.
- Computed *RTTs* from tcpdump timestamps, aggregated per-TTL, and supported both Unix traceroute+tcpdump and Windows tracert logs.

WORK EXPERIENCE

Five Guys, Shift Leader January 2021 - November 2021
Bruster’s Ice Cream, Shift Leader April 2022 - August 2022