Back End Engineer - Full Job Description

# 1. Job Title and Summary

\*\*Job Title:\*\* Back End Engineer (Back-End Developer, Server-Side Developer)

A Back End Engineer is responsible for building and maintaining the parts of web and mobile applications that users don’t see. This includes servers, databases, APIs, and the logic that drives core app features. The role exists to ensure secure, fast, and reliable data flow between users and the app’s internal systems.

# 2. Responsibilities

* Develop and maintain backend systems using languages like Python, Java, or Node.js.
* Design and manage databases (e.g., PostgreSQL, MySQL) to handle app data securely and efficiently.
* Build and maintain RESTful or GraphQL APIs to enable communication between front-end and back-end.
* Troubleshoot and debug server-side code and infrastructure issues.
* Write automated tests to ensure backend code works as expected.
* Collaborate with front-end developers, product managers, and DevOps engineers in team environments.
* Optimize application performance for scalability and reliability.

# 3. Required Skills and Tools

\*\*Programming Languages & Technologies:\*\* Python, JavaScript (Node.js), Java, C#

\*\*Frameworks & Libraries:\*\* Django, Flask, Express.js, Spring Boot

\*\*Databases:\*\* PostgreSQL, MySQL, MongoDB, SQLite

\*\*Tools & Platforms:\*\* Git, GitHub, Postman, Docker, Linux, AWS, Jenkins

\*\*Soft Skills:\*\* Teamwork and collaboration, problem-solving, attention to detail, time management, clear communication

# 4. Sample Deliverables

* RESTful API endpoints for a web or mobile app
* Data models for storing user accounts, scores, or product information
* Unit and integration test suites
* Server-side logic to handle authentication and data validation
* Database schema and documentation
* Deployment scripts (e.g., Dockerfiles, GitHub Actions workflow)
* Performance monitoring reports or bug fix logs

# 5. Ideal Work Environment

Company Type: Startups, sports tech companies (e.g., teams like the Atlanta Falcons or data analytics firms for the NBA), mid-sized tech firms, or large enterprises like Amazon or ESPN.

Work Style: Mostly team-based with regular collaboration via standups, code reviews, and sprints. Often agile or scrum-based workflow. Encourages independent problem-solving but within structured systems. Remote-friendly or hybrid settings common in tech teams.

# 6. Growth Style and Rigor

Pace: Moderate to fast-paced depending on company type; sports seasons or product launches may increase urgency.

Mentorship: Common for junior-level roles; many companies pair juniors with senior engineers or tech leads.

Structure: Clear structure in tasks (sprints, backlogs, tickets), but room for creative solutions.

Freedom: Freedom to choose tools and suggest improvements once trust is built.

Pressure: Deadlines and performance expectations exist but vary by team; collaboration helps reduce stress.