## **Topic Recommendation:**

# Topics in backend engineering

#### **Course Description**

Introduction to topics in backend engineering such as, javascript, java, embedded, python, automated-tests, linux, aws, c++, django, node.js, machine-learning, sql, zeromq, angular, cassandra,

stage equity packages 401k match competitive medical, distributed system c ++ applications contribute broadly, productize embedded linux distributions create drivers, mobile development experience building distributed service, volume efficient etl data pipeline

### **Course Learning Outcomes:**

evaluate new product concepts work face console frontend build monitoring orient appreciates performance tradeoffs vs take two startup teams base backend infrastructure build embed linux devices embed software platform orient architectures curiosity improve surgical efficacy operate systemso development get us closer excite consumer application retain 10x engineers operate four e include health insurance augment reality pace environment develop prototypes use technology grow fast exist team implement best grow company share reward pay vacation increase velocity drive force delight customers amaze story advance chat develop backend require).

#### Summary from top job descriptions:

create simple

Your work will help define our company as it grows and you will build products that will shape how Augmented Reality infrastructure works.

We are looking for deeply technical engineers who understand different tradeoffs when building different systems.

Patient safety is our highest priority. Primary Function of Position: Work with an incredibly talented team to design and build the embedded software platform and feature set for next-generation surgical robotic systems.

The successful candidate must excel in a high-energy small team environment, be able to drive to solutions from rough requirements, and have a commitment to high product quality.

A strong sense of shared responsibility and shared reward is required. Roles and Responsibilities: Work on a cross functional team

to develop technical specifications and evaluate design trade-offs – specifically in the area of platform/infrastructure software•

Design and development of product-focused, rock-solid, C++ software in a heterogeneous, multi-processor

SoC/FPGA/real-time-embedded environment• Develop software for embedded Linux devices:o Customize and productize

embedded Linux distributionso Create drivers that interface with custom FPGA deviceso Design and implement multi-threaded,
distributed system C++ applications• Contribute broadly to many areas of software development, including but not limited to:o

Extension of current frameworks to new processors and operating systemso Development of research prototypes used to evaluate
new product concepts• Work with electrical engineers to bring up new, custom hardware

Geomagical Labs is an AI startup, developing an exciting consumer application, for millions of people. We are looking for a back-end engineer, with excellent systems software experience, to join our startup team and lead our back-end platform development. As platform infrastructure developer, you will work closely with Geomagical Labs' core team of technologists to design and develop our end-to-end cloud technology platform for our mass-scale consumer application.

The role includes development of data pipelines, application servers, networked services, databases, and APIs to provide real-time support for web clients, mobile clients, and algorithmic services. In addition to production apps and services, you will develop prototypes, algorithms, tools, benchmarks, data sets, and contribute to the design and construction of a continuous integration software development environment. Benefits Rare opportunity to join an early tech startup adventure when it is less than ten people, led by founders who've taken two startup teams through IPO.

We believe that AI technologies and data-driven solutions are the driving force to establish the new standard of business operation and productivity. As a backend engineer, you'll: Design and build a highly scalable and available cloud-based backend infrastructure Build and optimize the state of the art conversation engine system Design and build the high-volume efficient ETL data pipeline for the end-to-end machine learning and analytics systems Build and maintain a performant API system that serves the customer-facing console frontend Build monitoring & alerting platforms, automation tools and continuous integration environments Follow the product from inception to launch, and own large parts of the product's execution Conduct code reviews for our peers, and learn from code reviews conducted with you BenefitsWe are a fast growing startup backed by Y-Combinator, with a great product and happy customers.

We pay competitively with equity and offer all the best startup benefits, including health insurance, paid vacation, and flexible Work from Home policy.

But more than that, we provide a supportive environment where you can do the best work of your life, where creativity and personal initiative are cherished, where product quality standards are nothing short of excellent, and where you have a direct, leading role in delighting customers.

Is a full-stack engineer with 4+ years of production experience (Python/Django strongly preferred but not required). Senior Frontend Developer:We're building a unique service that allows video makers and musicians to understand how is their content used, who is consuming it, what parts are clicking with what type of audience and much more.

Most of the code is currently written in Java, Go and C/C++. As a small team with a huge amount of servers (in thousands) we use CI (Jenkins) & Packer to build custom machine container images and Terraform & Ansible for infrastructure & server provisioning with additional internal tools that help with our auto scale requirements.

Requirements:- Very good knowledge of Javascript, React, Node.js- You have previous experiences with Ansible- You can develop very stable code with focus on efficiency- You're a test junkie and write test even when you start with a "Hello World"- You have a good knowledge of PostgreSQL (or at least MySQL)- You have worked with a queue system before- You like to share your knowledge with your colleagues