

**Tribhuvan University Faculty of Computer Science and Information Technology**

**An Internship Proposal on**

**“Backend Django Developer”**

**Submitted to**

**Department of Computer Science and Information Technology**

**Texas International College**

***In the partial fulfillment of the requirements for the degree of Bachelor in Computer Science and Information Technology***

**Submitted By:**

Manish Gautam (5-2-1103-0120-2019)

Roll no: 24704/076

B.Sc. CSIT 8th Semester, 2076 Batch

2080-12-09

**1. INTRODUCTION**

I am actively seeking an opportunity to intern in developing web applications using the Django framework. Django is a high-level Python web framework that promotes rapid development and emphasizes clean, practical design. I've always been passionate about coding, especially in creating web applications. With a strong grasp of Python and Django, I'm excited to delve deeper into these technologies and gain hands-on experience through real projects during this internship.

Staying updated with the latest trends is vital in backend development, and I'm dedicated to continuous learning to keep pace with industry advancements. Collaborating with experienced developers is something I eagerly anticipate, as I believe it's an invaluable opportunity to learn and improve my skills. Overall, this internship aligns perfectly with my interests and aspirations. It not only allows me to pursue my passion for coding but also offers a platform to learn from professionals and contribute meaningfully to the field of backend development. I'm enthusiastic about the journey ahead and the opportunities it presents for personal and professional growth.

Over the last year, I've been deeply involved in learning Django, initially sparked by a skill development course at Texas International College. Since then, I've been enthusiastically practicing and applying my knowledge to build web applications. Now, I'm eager to take my skills to the next level through the internship opportunity. As I embark on this internship journey, I am motivated by a desire to learn, grow, and ultimately make a positive impact in the field of backend development.

**2. PROBLEM STATEMENT**

As a beginner in Django backend development, I find myself facing various challenges as I dive into this field. While I'm excited about learning, there are certain areas I've identified as both important and somewhat daunting.

I'm currently navigating through several key concepts. While I'm comfortable with basic project setup and CRUD operations, I'm working on understanding APIs, deploying applications, and mastering middleware and caching. Additionally, concepts like view sets, routers, and writing tests are areas I'm eager to explore further. I recognize the importance of Git, GitHub, and basic web development knowledge in this journey. Looking ahead, I'm focused on building APIs, implementing authentication, and deepening my understanding of request-response cycles and HTTP methods. As a learner in Django backend development, I find it challenging to keep pace with the rapid advancements in technology. With new frameworks, libraries, and tools emerging frequently, staying relevant and proficient is crucial. Balancing innovation with stability while meeting deadlines is tough. However, I'm committed to refining my skills and adopting best practices to overcome these hurdles.

I'm actively seeking an internship in this field to delve into organizational culture and different work environments firsthand. My goal is to grasp the importance of feedback, enhance my communication skills, and maintain a journal to monitor my growth. Understanding workplace culture is crucial for me, and I'm determined to apply my knowledge and skills effectively in practice.

**3. OBJECTIVES**

* To build strong backend systems using Django for efficient web applications.
* To demonstrate knowledge and seek learning opportunities.
* To collaborate effectively with seniors and team members.
* To minimize errors and learn from mistakes.
* To meet deadlines consistently.
* To acquire company-specific knowledge and skills.
* To work professionally, deploy abilities, and enhance communication skills.

**4. DESCRIPTION OF INTERNSHIP WORK/PROJECT**

I haven't secured an internship yet, but once I do, I'm committed to diving into learning with enthusiasm. I'll seek guidance, collaborate closely with my team, and adapt to new challenges. With professionalism and a positive attitude, I'll take ownership of my tasks to ensure project success.

**Skills:**

* Proficient in Python programming language.
* Familiarity with Django framework and its core concepts.
* Ability to work with databases, such as PostgreSQL or MySQL.

**Knowledge:**

* Continuous learning mindset.
* Knowledge of Object-Relational Mapping (ORM) and its implementation in Django.
* Familiarity with RESTful APIs and how to create and consume them.
* Knowledge of software development methodologies, such as Agile or Scrum.

**Job Description:**

* Demonstrate a strong commitment to learning and improving coding skills in Python and Django.
* Receive guidance and mentoring from experienced developers to enhance technical skills and knowledge.
* Follow coding standards and best practices to write clean, maintainable, and efficient code.
* Learn to integrate and consume RESTful APIs in Django applications.
* Show initiative and take ownership of assigned tasks, seeking guidance when needed.

**5. INTERNSHIP PLAN**

Duration: 12 weeks

**Weeks 1-2: Onboarding and Introduction**

At the start of my internship, I'll attend orientation sessions to learn about the company's culture and rules. I'll meet with mentors to talk about what I hope to achieve during my internship. Then, I'll get to know the tools we use for managing projects and communicating. Throughout the internship, I'll keep a diary to note down everything I learn and do.

**Weeks 3-12: Learning and Working**

I'll collaborate closely with the backend development team, actively participating in all stages of projects, from design to implementation and testing. Under the guidance of experienced developers, I'll gain hands-on experience in building robust backend systems and integrating frontend components. I'll prioritize professionalism, ensuring I meet deadlines and communicate effectively with the team. Throughout the internship, I'll focus on applying best practices to ensure scalability, reliability, and security in web applications. Additionally, I'll actively engage in project meetings, seeking feedback and sharing insights to contribute effectively to the team's success. Moreover, beyond gaining technical skills, I'll value the networking opportunities and the compensation offered during the internship.

In addition to my duties at the organization, I'll also focus on preparing my internship report for the defense. This report will outline my experiences, learnings, and accomplishments during the internship, showcasing my growth and skills acquired.

**6. EXPECTED OUTCOME OF INTERNSHIP ACTIVITIES**

The expected outcomes of the internship activities that I am eagerly anticipating include:

* Enhanced Technical Skills: By actively participating in real-world projects and receiving guidance from experienced developers, I aim to enhance my proficiency in Python programming and Django framework.
* Improved Collaboration and Communication: Through close collaboration with the backend development team, I anticipate improving my teamwork and communication skills.
* Application of Best Practices: By following coding standards and best practices, I expect to develop the ability to write clean, maintainable, and efficient code. I anticipate learning to integrate and consume RESTful APIs in Django applications, thereby ensuring scalability, reliability, and security in web applications.
* Networking Opportunities: I look forward to leveraging networking opportunities during the internship to expand my professional network. By connecting with professionals in the industry and building relationships, I aim to explore potential career paths and uncover future job opportunities.
* Additional Benefits: This internship experience will also help me build confidence, strengthen my resume, offer career guidance, and facilitate a smooth transition to a permanent job in backend development.