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COSGrid Networks - Internships Overview

Work on the next-generation of Cybersecurity and SD-WAN products that will change how businesses around the world securely connect and defend their digital backbone. COSGrid Networks is looking for interns who are curious, who want to be entrusted with real responsibility and embrace the opportunity to write code, build and market products that customers love.

COSGrid Networks provides one of the leading Secure SD-WAN solutions transforming Enterprise WAN. Founded by IIT/IIM Bangalore alumni, we've been associated with many leading institutions such as IIT Kanpur's SIIC and DSCI's National Center of Excellence (NCoE) for Cybersecurity Technology. We combine in-depth research and deep expertise in Networking & Cybersecurity to build products that securely connect and defend Enterprises, branch offices, remote working employees, cloud etc. Our product RefleX-WAN is deployed by many enterprises and is delivering superior customer experience across India and heading towards global deployments.

As a COSGrid Intern, you will work directly with and be mentored by the highly experienced engineers and founders who are the driving force behind our amazing product. Fast track your career through exploring new technologies, solving real problems leading to accelerated learning with a solid foundation.

Benefits

- Opportunity to work on cutting edge technologies such as Cloud Native platforms,, Cybersecurity, Big Data, Edge Computing, IoT, AI/ML, 5G etc.
- Get entry into exciting domain of Cyber Security and learn how Next-Gen Cyber Security solutions are created using other emerging/deep technologies mentioned above
- High pace, non-hierarchical, start-up work culture.
- Opportunity to engage with like minded techies in cyber security domain in the country
- Shadowing, mentoring, and training opportunities with seasoned professionals
- Opportunity to participate in networking events and Deep-Tech start-up ecosystem

1. Position: Backend Developer & ML Intern

Responsibility:
We are looking for a talented Backend Developer/ML Intern, you'd be responsible for building the core applications that power the COSGrid platform. You'd be implementing web services with business logic, building APIs, analytics, ML insights and scale out existing infrastructure in Python and Django.

- Understand the product requirements and implement them as per specifications

- Develop efficient, reusable and reliable Python based web services features

- Build RESTful APIs and work with front-end developers for integration

- Develop high performing & scalable/distributed big data processing applications

- Improve the functionality of existing systems and optimize the performance

- Researching new tools/ technologies / processes and adopting them in work

- Write well-crafted, well-tested, readable, reusable modules and maintainable code

Skills Required
- Experience building web applications in Python based web frameworks such as Django, Flask. REST API experience preferred.

- Have great problem-solving skills and have knack for writing clean Python code

- Deep understanding of OOPS and software engineering principles

- Strong Familiarity with databases: relational DBs, no-SQL DBs and Big Data

- Understanding of fundamentals behind a secure and scalable application

- Familiarity with Cloud tech such as AWS and micro services is advantage

- B.Tech or M.Tech in Computer Science or related field (70% more aggregate)

- Understanding of AI/ML concepts and Numpy, Pandas, Scikit-learn (preferred)

2. Front-end Developer Intern

We are looking for a talented Front-end Developer Intern who can take ownership and want to lead the product development. And share our passion in redefining the way networks and connectivity are built and managed. If this is the next challenge you seek, read further.

Responsibilities

You'd be responsible for developing new user-facing features working closely with product management, and development teams.

- Interact with the product management team to understand the requirements

- Build high-quality, robust features; create elegant, responsive and interactive interfaces across multiple devices.

- Work with Backend engineers on the design and implementation of features

- Write well-crafted, well-tested, readable, reusable modules and maintainable code

- Participate in code reviews to ensure code quality and distribute knowledge

Qualification & Skills Required

- Strong experience in Javascript, TypeScript, HTML5, CSS / SASS

- Familiar with JavaScript framework/libraries such as Angular, React is preferred.

- Strong in OOP, Functional, Reactive Programming and MVC concepts in JavaScript

- Solid grasp of RESTful web services and websockets

- Familiarity with d3.js or other chart libraries is preferred.

- Basic knowledge of image authoring tools such as Gimp or Photoshop is a plus.

- Experience debugging using tools like Chrome Developer Console

- Team player with excellent communication skills.

- B.E / B.Tech or M.Tech in Computer Science or related field is required with (more than 70% aggregate preferred)

3. Software Engineer - Systems & Networking Intern

The ideal candidate has extensive knowledge with TCP/IP, Unix system APIs, and has a strong grasp of sockets. This is a great opportunity to work with COSGrid SD-WAN products while expanding your knowledge and developing your skills in network security.

Responsibilities

- Design , development and test the software of C-Edge product

- Implement new features according to identified specs

- Research, investigate and define new areas of technology to enhance existing product; re-evaluate the design and implementation of current source code.

- Maintain and document code using a source control system.

Qualification & Skills Required

- Working knowledge of C/C++, TCP/IP networking, Unix system APIs, Strong grasp of sockets and IPC mechanisms a plus.

- Strong knowledge of C and data structures required.

- Excellent problem solving and troubleshooting skills.

- Knowledge of Python or Go lang preferred

- Relational database skills is an asset

- Capable of switching focus in various situations and apply themselves to quickly learning new technologies and adopting new methodologies.

- B.E / B.Tech or M.Tech in Computer Science or related field is required with (more than 70% aggregate preferred)

4. Cloud Operations Engineer - Python Automation

The ideal candidate is passionate about running and automating in Cloud, Networking and Storage and thinks big picture. Think worst case scenarios and run 100% uptime infrastructure.

Responsibilities

- Build upon the infrastructure that supports delivery of our products and services

- Work with our Engineering Team to build tools and establish processes that can help developers deploy and release their code seamlessly

- Create automation tools for building, provisioning of servers and DevOps

- Ensure 24/7 Global availability of the COSGrid Security Cloud

- Help automate systems for 24x7 monitoring and failure recovery.

- Proactive operations through monitoring, routine audits, patching, upgrading systems, capacity planning and benchmarking.

Qualification & Skills Required

- Excellent scripting skills and experience Python and Bash

- Exhibit strong working knowledge of Linux/UNIX system administration skills

- Linux/Unix Knowledge of cloud infrastructure (firewalls, DNS, DHCP, NAT)

- Knowledge of Virtualization, Cloud , Services, API, Docker and Kubernetes preferred

- Ability to learn quickly and adapt to changing needs of the system

- Strong problem solving, verbal and written communication skills

COSGrid
NETWORKS

- Bachelors or Masters in Computer Science, Cybersecurity, Cloud Security, or a related field

5. Security Research Engineer Intern

We are looking for a high-energy, talented Security Research intern. As a Security Engineer, you will take part in product content development and build logics and signatures to mitigate emerging security threats. You will analyze protocols and investigate various attacks utilizing network analysis tools and modern data analysis frameworks.

Responsibilities

- Analyze network protocols and develop IPS signatures and App rules that fulfills COSGrid Cloud product engines.
- Analyze malware threats and author generic signatures
- Develop automation scripts to aid in research and analysis tasks
- Enhance product accuracy and its ability to detect new threats in the dynamically-changed security landscape.
- Log analysis to identify new threats
- Utilize Data Warehouse with big-data technologies to support your work.

REQUIREMENTS

- Hands-on experience in the cyber-security threats, techniques and tools
- Knowledge of networking architecture and protocols (TCP/IP, DNS, SSL, HTTPS).
- Understand the cyber-security landscape, and common attack scenarios: Malware C&C, Drive-by attacks, Phishing, Network scans, etc.
- Experience (**Hands-on**) with Wireshark and PCAP analysis.

- Experience with at least one scripting language such as Python

- Analytic spirit: define a thesis and validate it based on in-depth analysis