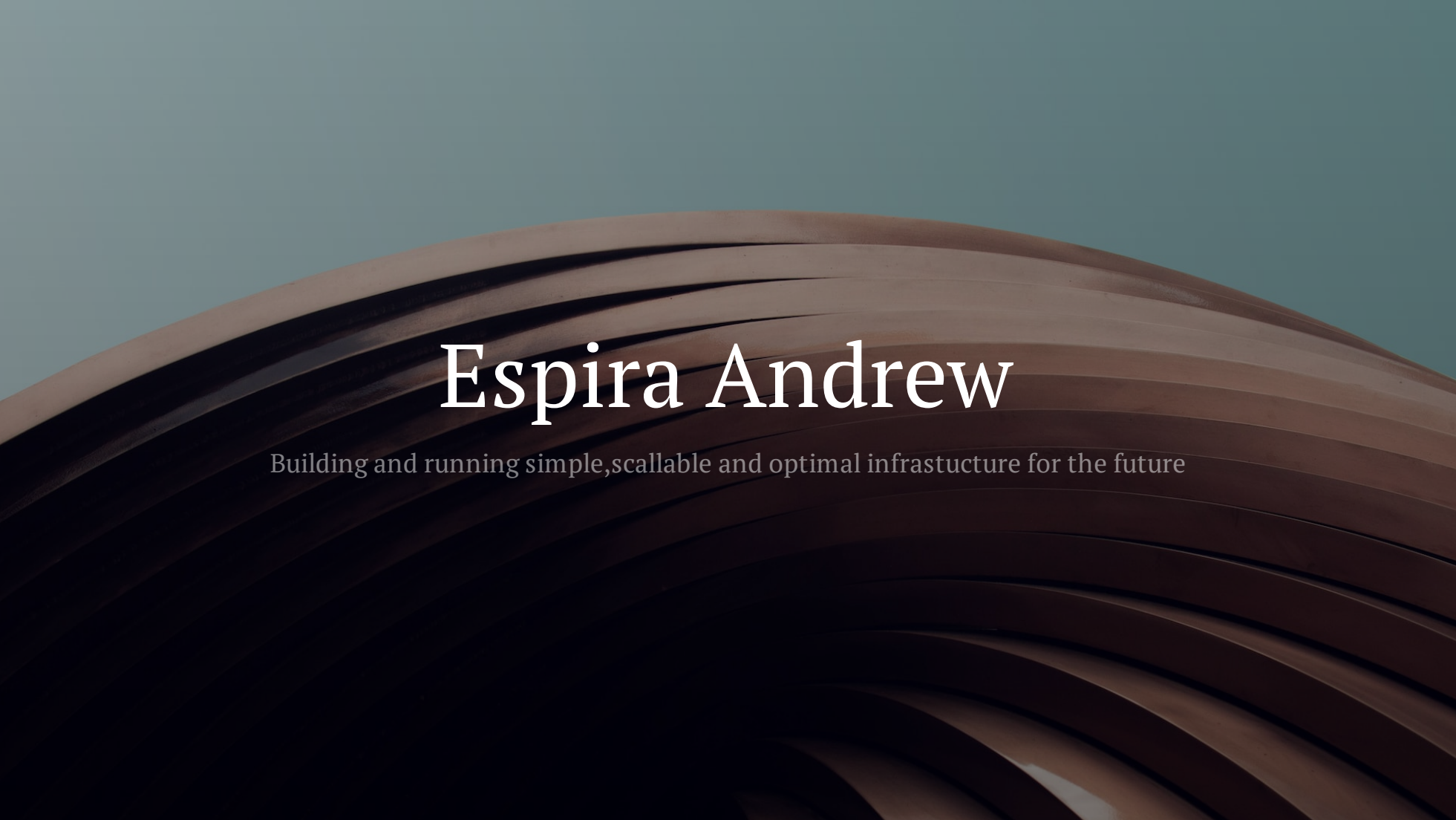
Espira Andrew
Building and running simple,scallable and optimal infrastucture for the future

Espira(who is he)

- About me
- Career and Experience
- Thank you

About Me

- Andrew Espira
- BSC computer technology,Jkuat
- SRE Engineer
- Interested in cloud Native solutions, Observability and monitoring, distributed computing, cloud engineering
- open source community
- Football fan
- passionated about Cloud computing,AI and the future of distributed computing

Some notes

- Feel free to reach out and ask any question
- Slides & code on GitHub

Espira Andrew

My first encounter with a computer was in 2004,while still in class 4 during our computer classes. Over the years i fell in love with the machines but was not interested in pursuing a career in computing. I wanted to be a pilot(dream job).I joined campus to pursue electrical engineering but in my first two weeks,i dropped the course then embarked on a journey of self discovery. I took up computer technology and over the years,this has been one of the many choices in life that has really paid off.

Work Experience

Programming was one of the few things that facinated my curiosity. The moment i wrote my first program in c++,my journey to software development started. Most of my campus years i spent building applications for companies and being involved in tech communities.

Data Engineering/ML/AI

My first job was as a data engineer in a small startup in Nairobi. I was in my final year in campus and really pursuing a AI/ML experience in real life. I got an entry job that saw me gain quite alot of technical hands on experience

- Assembled large, complex data sets that meet functional / non-functional business requirements.
- Identified, designed, and implemented internal process improvements: automating manual processes, optimizing data delivery, redesigning infrastructure for greater scalability
- Build the infrastructure required for optimal extraction, transformation, and loading of data from a wide variety of data sources using SQL
- Build analytics tools that utilize the data pipeline to provide actionable insights into customer acquisition,operational efficiency and other key business performance metrics.

System Engineering/System Administration/Linux systems

- Implemented high performance platform by integrating cluster nodes of Linux server using distributed computing models
- Reduced analyis time by implementing high performace computing for big data and research data computations by boosting processing time through cpu optimizations and job managements
- Automated data piplelines and softwares deployment by building docker images and data pipelines for common workflows which increased data processing time
- Offered management and system recommendation on management of high-performance computer systems, clusters, operating systems, peripherals, and system interfaces; monitors system usage;ensures that the high-performance computing complex is operating at optimal performance and reliability levels
- Designed and implemented server architectures on parallel computing platform to efficient manage jobs,file storages and users using job manager tool(SLURM) and IPA(identity management Framework)
- Identified security vulnerabilities and implemented procedures to ensure data center met all security requirements by analyzing system logs and network logs

DevOPs,SRE and Cloud computing

- Designed and built systems and infrastructure with guiding principles of high AWS well architecture framework and implementing system architectures that improve our operation efficiency
- Developed and implemented software release management strategies for various applications according to agile process and continuous delivery practices Using Gitops operations to deploy and manage Kubernetes
- Increased Continuous Intergrations using GitHub Developed and implemented software release management strategies for various applications according to agile process
- Worked on improving securing, building reliable systems, and deploying multiple applications on AWS by taking advantage of services like AWS amplify, ec2, s3, Elb, route53, CloudWatch, CloudFormation etc.
- Improved application performance by in cooperating micro-services instrumenting and tracing to enhance our observability and monitoring on our services
- Using APM tools to advance and implement Service level objectives and monitoring service levels indicators and error budgets to offer our customers reliable and available services
- Improved code quality by introducing automated testing, code review, coding standards and following best

Team-collaboration

Having worked both in academia/research industry and private sector,have managed to acquire personal skills that have seen my growth in my career and personal life

- communication
- Professionalism
- team work
- collaboration
- Problem solving
- Time management
- Conflict resolution
- Leadership
- Dependability
- independent

Thank you for this opportunity!