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School of Solana Season 5

LECTURE 1

Introduction

Adam Hrazdira | Ondrej Rehacek | Andrej Lukačovič | Josef Gattermayer, Ph.D.

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Speakers

Adam

- Solana auditor @ Ackee Blockchain
- Speaker & your support on Discord
- Discord: lkrk

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Speakers

Ondrej

- Main School of Solana speaker
- Advisor and Ackee Blockchain cheerleader
- Now focused on Web3 gaming

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Speakers

Andrej

- Solana auditor @ Ackee Blockchain
- Speaker & your support on Discord
- Discord: dontcallmenymphadora

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Organisation

Emre

- **Community Manager @ Ackee Blockchain**
- **Brand Manager**
- **Discord & Twitter: @ekincixyz**

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Organisation

Josef

- Co-founder, CEO @ Ackee Blockchain
- Ph.D. and Assistant Professor @ CTU in Prague 🎓
- Discord: pepus_cz
- Twitter: @jgattermayer

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About Ackee Blockchain

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blockchain security
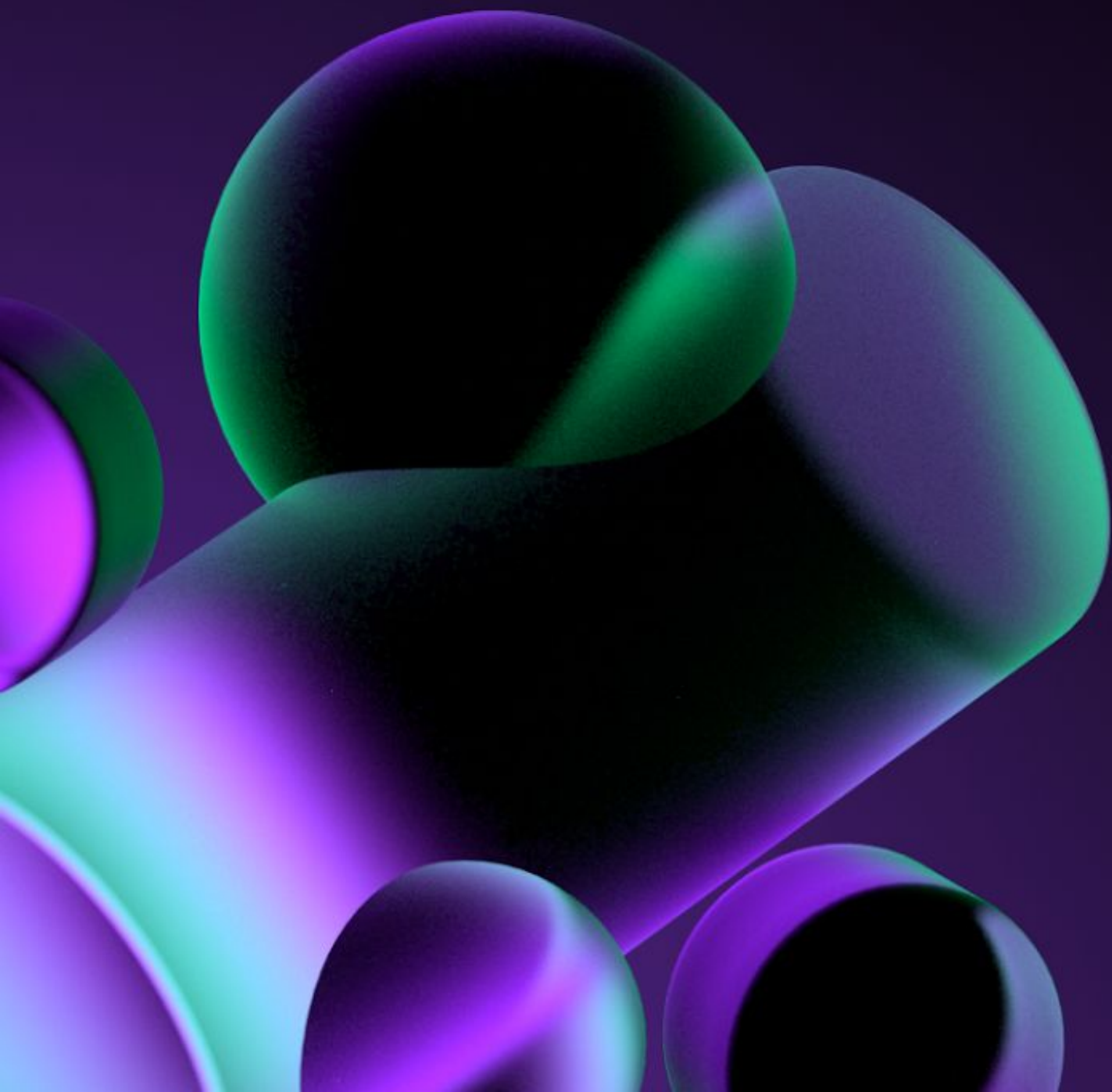
@AckeeBlockchain
https://ackeeblockchain.com

- **Security auditors and researchers**
  - Solana
  - Ethereum
- **Open source believers and contributors** 💜
  - Eth: Wake testing framework, Tools for Solidity
  - Solana: Trident testing framework and fuzzer
- **Education is our DNA**
  - School of Solana
  - Blockchain course at CTU in Prague
  - Educational partner of Solana Foundation

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We work with

neon

deBridge

Marinade

1inch
NETWORK

LayerZero.

AXELAR

Trader Joe

FOUNDATION

ethereum
foundation

About the course

What is this course about ?

- **Introduction to Solana:**
  - ○ **Core concepts;**
  - ○ **Programming Model;**
  - ○ **Ecosystem.**

- **Introduction to Rust and Anchor framework.**

- **Programming ~~smart contracts~~ programs on Solana.**

- **Having fun, building community and WORK TOGETHER.**

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- **Introduction to Solana:**
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What this course is <u>not</u> about

- **Introduction to Blockchain.**

- **Advanced Rust/Solana programming course.**

- **How to get rich in 9 weeks.**

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Prerequisites

- Basic familiarity with a CLI.

- Basic programming knowledge in any language.

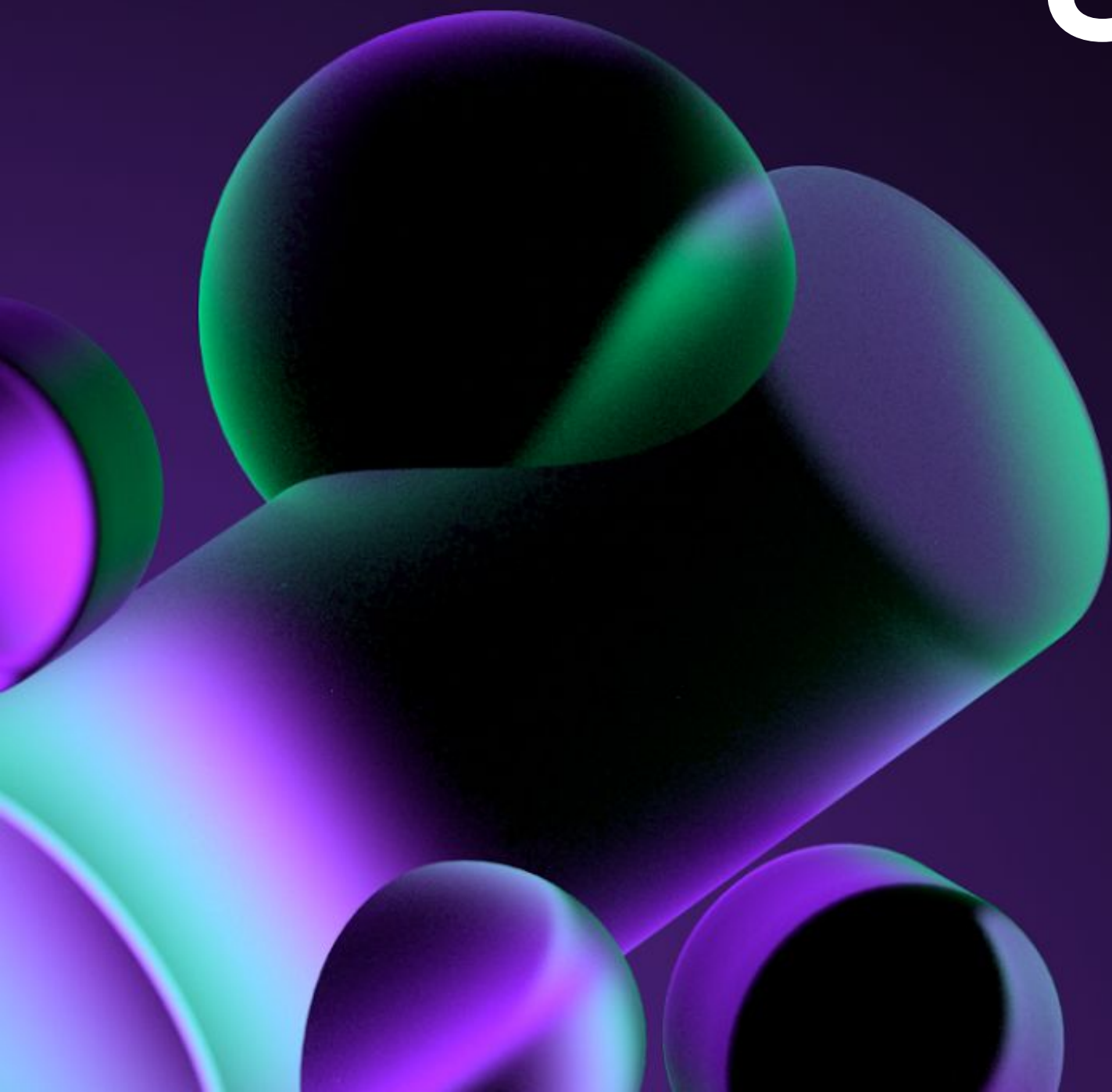- Basic overview of what blockchain is.

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How does that work ?

- **Lessons are pre-recorded, premiered on Youtube every Wednesday.**
  - ○ **Links will be shared on Discord in advance.**

- **Tasks will be handled via GitHub Classroom.**

- **Support on Discord and during on-demand AMA sessions.**

- **<u>Do it at your own pace</u>, only requirement is submitting the tasks and work together.**

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Certification requirements

- **7 lectures + bonus, task/test after each lecture.**
  - Deadline always Tuesday EOD (UTC)

- **Ackee Blockchain & Solana foundation NFT.**
  - Frozen auth to your wallet
  - Your name in metadata

- **Use your badge to enter advanced courses from partners.**

- **Skip lecture and just do the tasks if you feel confident.**

Solana Introduction

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Solana

- Founded by Anatoly Yakovenko in 2017

- The Solana mainnet-beta went live officially in March 2020

- Native token SOL

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Solana offerings

- **Scalability**
  - Sitting at comfy 4000 TPS
  - Scales natively with Moore's Law
  - No additional complexity through sharding or Layer 2 "solutions"

- **Decentralization**
  - Nakamoto coefficient 31
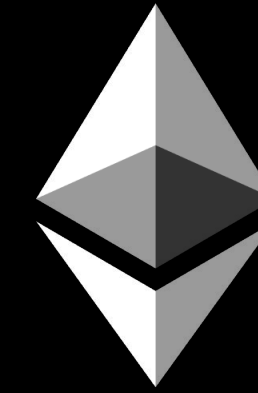   - https://nakaflow.io/

- **Inexpensive execution**

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Solana x Ethereum

Solana	Ethereum
Proof of Stake with PoH	Proof of Stake
400ms	13s
Stateless	Stateful
Rust	Solidity
~50k TPS	15TPS

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Solana's key features

- Proof of History

- Tower BFT

- Turbine - block propagation

- Gulfstream - mempool

- Sealevel - runtime

- Pipelining

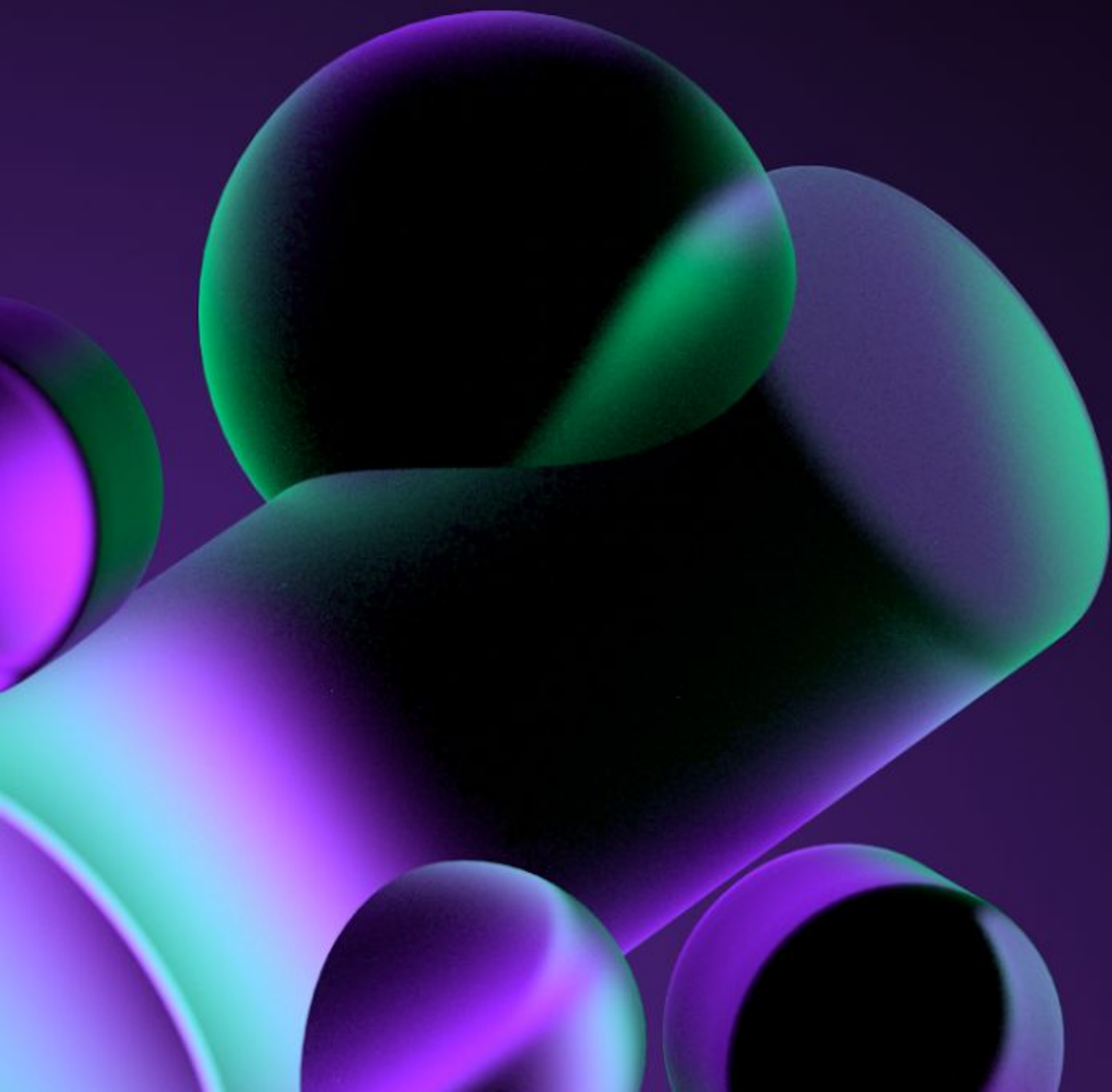- Cloudbreak

- Archivers

Where can I learn all of that ?!

- **Ackee Solana Handbook**

  - 49 pages introduction to Solana by Ackee Blockchain

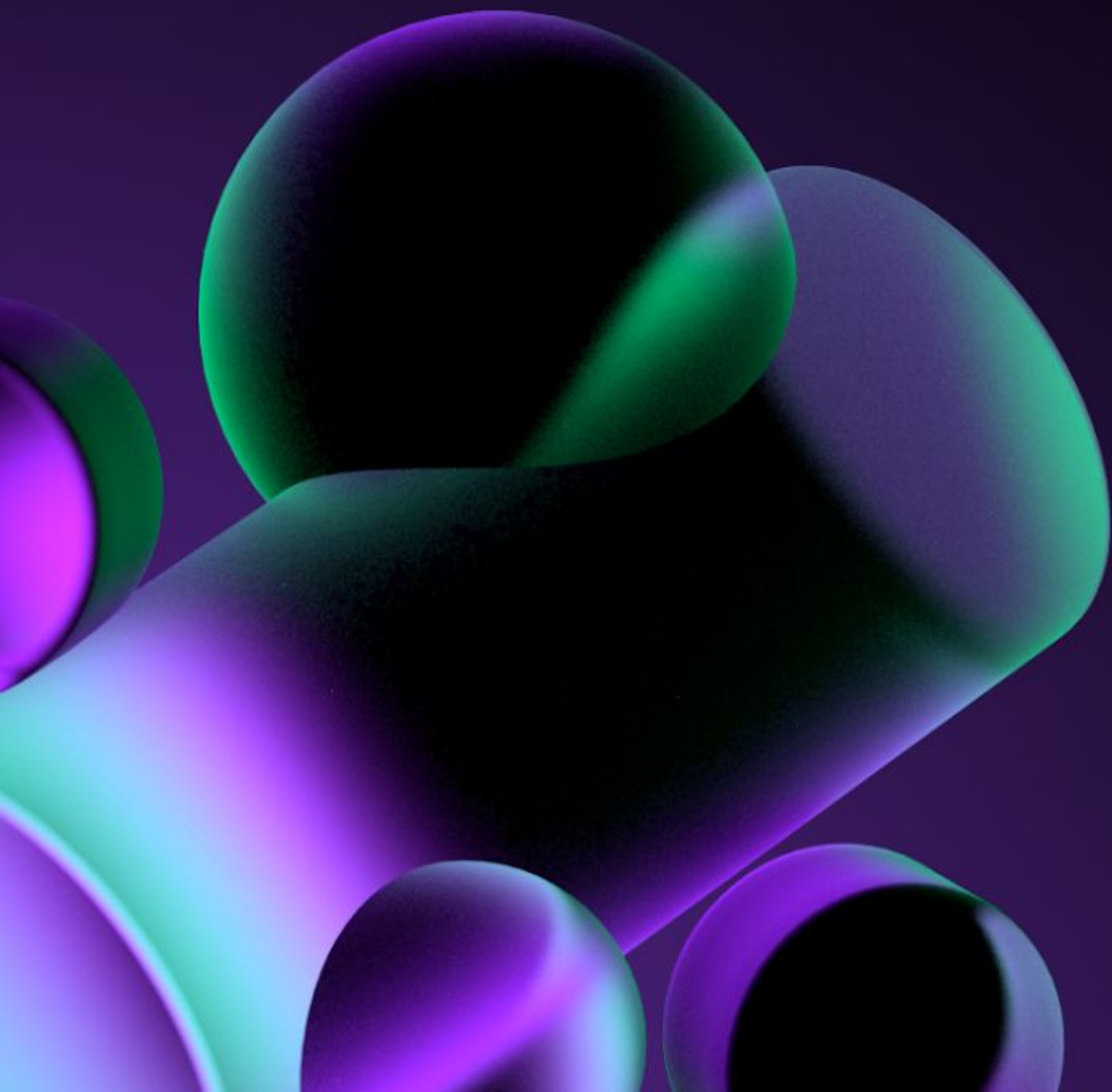 - Created specially for the School of Solana

Get it here 👇

https://ackeeblockchain.com/solana-handbook.pdf

Solana Handbook

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Task 1

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Thank you

See you next time!