

Christof Teuscher

ECE 410/510: Hardware for AI and ML

Codefest #1

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Codefest

A codefest (a.k.a hackathon) is a collaborative event where participants, often in teams, work intensively on a project within a short timeframe to solve a problem or create a prototype.

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Codefest goals

- **Rapid prototyping**, solve problems, and create complex designs.
- Learn how to use **LLMs** efficiently to create complex design we couldn't create without.
- Use LLMs to learn and to gain a deeper understanding of the subject matter.
- Collaborate, share and learn from each other.
- Present, document, communicate.
- **Motivate you to go home and brings things to the next level.**

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Today: Warm-up

- Explore “vibe coding”
- Install tools and get used to the workflow.
- Lay some groundwork for co-design.
- Start with high-level languages.
- Use profiling of different workloads to understand where CPU cycles are burnt and where the bottlenecks are.

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Show your work

- Volunteer to show what you've got (whether it works or not)
- Google Meet link in Slack.



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