

# **DevFest AI Workshop**

# Al Workshop Agenda

Time	Speaker	Company	Sessions
11:00 AM - 11:30 AM	Sako M	Gladly	Intro to workshop / Hackathon Building Blocks
11:30 AM - 12:00 PM	Simon Farshid	assistant- ui.com	Human-in-the-loop Agents with assistant-ui
12:00 PM - 1:00 PM	Lunch		
1:00 PM - 1:30 PM	Ron Efroni & Tom Bereknyei	Flox	Flox: Rethinking How We Build & Collab
1:30 PM - 2:00 PM	Daniel Svonava	Superlinked	Building E-commerce Recommendations with Vectors

Time	Speaker	Company	Sessions
2:00 PM - 2:30 PM	Adam Chan	Weaviate	Get Chunked! Chunking Strategies for Retrieval
2:30 PM - 3:00 PM	Jose Menendez	Groq	Low Latency on LLMs and Agent Workflows
3:00 PM - 3:30 PM	Sam Stowers	Weights & Biases	Production-Ready GenAl Apps with Tracing & Evaluations
3:30 PM - 4:00 PM	Luke Hollis	Mused	Generative Interactive Environments: World Models and Learning from GDM Genie
4:00 PM - 4:30 PM	<u>Huan Li</u>	Chatie	Harnessing LLMs for Chatbot Development using Wechaty
4:30 PM - 5:00 PM	Wrap-up and Networking		

## Sessions

## Name: Sako M

• Company: Gladly

• **Bio**: Sako attended 40+ hackathons in just 9 months, will be setting the stage by diving into Hackathon Building Blocks and showing how to set yourself up for hackathon success! From ideation to execution, learn the strategies that make ideas fly!

### Session

- Title: Intro to workshop / Building blocks for hackathons
- **Description**: You'll learn how to set up a high-performance local environment, use 'aiproxy' for efficient proxy traffic management, and automate dependency updates with PlatformGen.

- Setting up local environment for speed
- Leveraging aiproxy to handle proxy traffic
- Apply PlatformGen Autonomous Dependency Manager

## Name: Simon Farshid

- Company: assistant-ui.com
- Bio: Simon Farshid is the founder of assistant-ui.com, a rapidly rising open-source
  React component library for Al chat. The company focuses on advancing humanmachine interaction by enabling developers to integrate Al agents into their apps.
  With 18,000+ monthly downloads and a partnership with LangChain, assistant-ui is a
  growing name in the Al developer community. Before moving to the US, Simon cofounded READO, a social app for book readers with 100,000+ monthly active users.

#### Session

- Title: Human-in-the-loop agents with assistant-ui
- **Description**: Learn about the different patterns to incorporate human feedback in your Al agents. We will go through a hands-on live coding session to build an interactive Al agent using assistant-ui, an open-source React component library for chat interfaces.
  - Understanding Human-in-the-Loop: An overview of why human feedback is essential in AI development and how it can be systematically incorporated, including Generative UI, approvals, and more.
  - Design Patterns: Learn about the right UX patterns for human input.
  - Building with assistant-ui: Step-by-step guidance on using assistant-ui to develop interactive agents.

## Name: Ron Efroni && Tom Bereknyei

- Company: Flox
- Ron's Bio: Ron is CEO of Flox, repeat founder, former head of Meta's Facebook
  Developer Infra Products teams, and current board member of the NixOS
  Foundation, where he supports and strengthens the NixOS community.
- Tom's Bio: Worked at Google, flew jet planes in the Marine Corps, trained cyberteams, worked with the Digital Service to bring modern software practices to the DoD, then created a contracting startup bringing AI/ML products to DoD.
   Throughout have found a consistent set of challenges and a set of superpowers

using Nix. This led to the desire to bring these superpowers to the rest of the world; hence contributing to Nix as a maintainer and founding Flox.

#### Session

Title: Flox: Rethinking How We Build & Collab

the basics and try some Local AI development.

Description: In this session, we'll introduce you to Flox. Flox is an open-source (GPL2) tool for simple and powerful system dependency mangement, per-project, and decoupled from your machine.
 Underneath, we are using Nix which gives us access to over 100,000 packages.
 Many of these packages are cross-platform and built natively for your machine whether you are using a Macbook or a Linux server in Google Cloud. Flox is designed to be simple to teach to your teammates so you can immediately be productive together without taking much time to learn Nix concepts. We'll start with

## Name: Daniel Svonava

- Company: Superlinked
- **Bio**: Daniel is a co-founder of Superlinked an open-source vector compute framework for building Metadata-aware Vector Search across RAG, RecSys, Search & Analytics. Previously, Daniel was an ML Tech Lead at YouTube Ads.

#### Session

- **Title**: Build e-commerce recommendations, search, and analytics with vectors
- **Description**: Use your unstructured AND structured data to handle queries like "popular blue t-shirts around \$50" for building a real-time personalized shopping feed and other features useful for e-commerce businesses with a few lines of python, running at scale in your own GCP account.
  - Topic 1
  - o Topic 2

## Name: Adam Chan

- Company: Weaviate
- **Bio**: Adam is a tinkerer by nature and an educator at heart. He started out his career creating curriculum on various topics in technology and delivering them to universities, high schools, and libraries.

#### Session

- Title: Get Chunked!
- **Description**: Join this multistep challenge presented by Adam at Weaviate that will take you from zero to hero on chunking strategies for retrieval-powered applications that leverage large language models.
  - Topic 1
  - o Topic 2
  - o Topic 3

## Name: Jose Menendez

- Company: Groq
- **Bio**: Jose is a SWE at Groq with 20 years of experience in the industry as Founder, high-performance data applications, Human/Computer interactions, and serves as a startup advisor in Silicon Valley.

#### Session

- Title: Low latency on LLMs allow for some fun agentic workflows!
  - Topic 1
  - Topic 2
  - Topic 3

### Name: Sam Stowers

- Company: Weights & Biases (W&B)
- **Bio**: Sam Stowers is an Al Engineer working on W&B's Weave, a leading LLM observability & evaluation tool, that takes 3 lines of code to instrument a gen Al app.

#### Session

- Title: Make Your GenAl App Production-Ready with Tracing & Evaluations
- **Description**: LLM demos are easy making them reliable enough for production is hard. Weave (from Weights & Biases) helps with every stage of development and deployment, so you can iterate rapidly and build confidence in your application.
  - Understand complex queries with tracing (3 lines of code!!)
  - Rapidly identify cost & latency bottlenecks
  - Implement evaluations to make LLM responses consistently good

• Test which LLMs are best for your needs.

## Name: Luke Hollis

• **Bio**: Luke is a 2x founder specializing in 3D graphics, currently working on building generative environments and simulations that feature 3D captures.

### Session

- **Title**: Generative Interactive Environments: Diffusion World Models and Learning from GDM Genie
- **Description**: Inspired by "Genie: Generative Interactive Environments" (Bruce et al., 2024), this session will give an overview of world models and review three recent papers to discuss implementation in gaming and training generalist agents.
  - World Models
  - Gaming
  - Realtime Interactive Video Generation

## Name: Huan Li

- Organization: Chatie
- Bio: Huan Li is a Google Developer Expert in Machine Learning, and a <u>GitHub Star</u>.
  He is an accomplished technologist and innovator at the intersection of artificial intelligence and real-world applications. He is the creator of Wechaty, the leading Conversational AI SDK for Chatbot development.

### Session

- **Title**: Harnessing LLM to Power Chatbot Development with Code-generation and Doc-explanation
- **Description**: Conversational AI has empowered Chatbot applications in recent years, making the Conversational User Interface (CUI) increasingly valuable.
  - Learn what Wechaty SDK can do
  - Design your requirement for automating your WhatsApp personal account
  - Generate source code by prompting your requirement in natural language to LLM