ABOUT

Chengdu 80 is a FinTech Design and Development competition for academic participants utilizing open source technology. As part of the SWUFE-CDAR annual conference, Chengdu 80 will provide opportunities for students to interact with leading academics in finance and technology, international financial institutions, and government and regulatory leaders. Each participating team will consist of up to 6 students from a single academic institution led by a faculty member or postdoctoral scholar and must include members of both genders and a mix of undergraduate and graduate students.

COMPETITION FORMAT

Chengdu 80 competition will consist of a development session and a presentation session. The development session consisting of 80 hours will occur at the Economics & Management Education Center on SWUFE campus. Participants will utilize provided computer terminals or their own devices connected to virtual machines with both Windows and Linux operating systems. Each participant will receive the same system configuration and computing resources. The environment will be offline while a set of full stack open source packages including frontend frameworks, charting components, UI libraries, backend frameworks, and other libraries for financial engineering, data science and blockchain development will be preloaded and disclosed prior to the competition. Teams will have an opportunity to add other open source libraries to the common system prior to the competition as well as submit requests for additional common libraries during the competition.

At the end of the development session, the prototypes and presentations from all teams will be loaded to a common computer used for the presentation session. In random order, each team will have 15 minutes to present their project and 5 minutes to answer questions. After each presentation, a panel of judges will evaluate the project across a set of criteria and winners will be announced at the end. Further details of the competition and system configuration will be shared with registered teams.

SCHEDULE & VENUE

Development Session: 8:00AM 10/31-4:00PM 11/03, Economics & Management Education Center, SWUFE
Presentation Session: 9:00AM 11/04, Waldorf Astoria, Chengdu, China
One of the following use cases will be selected at the time of the competition.

1. **ESG Index Builder**
   ESG investments incorporate non-financial factors regarding environmental impact, social responsibility and corporate governance into investment decisions. Chengdu 80 participants will develop a prototype to dynamically construct the ESG portfolio that best tracks a benchmark index based on users’ preference on sector weights. 5-year daily stock price, sector classification and ESG scores for all index constituents will be available for modeling purpose.

2. **Information Matching**
   Customers waiting in a long queue for a restaurant are likely to change their choices if they know they can enjoy a discount at other restaurants with no queues. Chengdu 80 participants will develop a functional prototype which can offer users discounts in real-time based on the restaurant customer occupancy and implement the discount to complete the dining transaction. Restaurant and customer profile will be available.

3. **Personal Initial Public Offering**
   Personal IPO provides private individuals access to funding at an early stage of their adult life by offering investors returns that are linked to the individual’s future spending. Chengdu 80 participants will develop a prototype that can price and issue the personal IPO to a registered pool of investors. Sample data including issuers’ profile and previous 1 year average credit card spending across various factors will be provided.

4. **Risk Visualizer**
   A well-developed risk visualization platform could help users clearly assess and convey risks to multiple stakeholders along the entire risk management cycle. Chengdu 80 participants will develop a prototype which allows users to visualize risk data of a portfolio. Instead of traditional heat map or statistical plots, we encourage participants to develop an interactive, comprehensive and attractive visualization interface which utilizes sophisticated charting components such as complex networks, multi-dimensional structures and flow charts. Each team should carefully define and compute several risk and relation measures for user selection. Sample data will include five-year history of daily data for securities, basic and additional factors.

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**ORGANIZERS**

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