Xinde (Cinder) Zhang, Ph.D.

Pioneer in AI+Finance Education | Creator of the DRIVER Framework™

Contact Information

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Profile: AI+Finance Education Pioneer

Internationally recognized pioneer who created the world's first comprehensive AI-integrated finance curriculum. Author of the **DRIVER Framework™**—the systematic methodology for AI-augmented financial analysis—now under contract as **three groundbreaking textbooks by World Scientific Publishing**, establishing the global standard for AI+Finance education.

Recruited by Purdue University to architect their AI finance programs after building the Financial Analytics program at University of Arkansas from zero to 130+ students with placements at **Goldman Sachs, JPMorgan, State Street, MasterCard, EY, and Walmart Global Tech**.

25 years of founding leadership experience across academic and professional institutions, including:

- Founding Director, ITS Department, Changchun Taxation Institute (2000-2002)
- Executive Director, China Family Wealth Management Research Center, Tsinghua PBCSF (2014-2015)
- Founder, Financial Analytics Program, University of Arkansas (2020-2025)
- Architect, AI Finance Initiatives, Purdue University (2025-Present)

Award-winning educator (2025 University of Arkansas Teaching Innovation Award, 2022 FMA Innovation Award Runner-Up) whose students declare: "*This class should be the gold standard for all of Purdue*" and "*I believe I have gained more practical knowledge that will carry me through my career in this one course than I have my entire career at Purdue.*"

Pioneering Contributions to AI+Finance Education

The DRIVER Framework™: A Revolutionary Methodology

Created the world's first systematic framework for AI-augmented financial education, addressing the fundamental challenge of how students can leverage AI without losing critical thinking capabilities. The DRIVER methodology—**D**iscover & Design, **R**epresent, **I**mplement, **V**alidate, **E**volve, **R**eflect—transforms passive learners into systematic thinkers who use AI as a cognitive training partner.

Key Innovation: DRIVER establishes AI as a "cognitive gymnasium" that builds analytical muscles through structured engagement. This pioneering approach has been validated through exceptional student outcomes

and is now being scaled globally through World Scientific's three-textbook series.

First-Mover Advantages & Market Positioning

Timing as Competitive Moat: Built comprehensive AI+Finance curriculum during critical 2020-2024 window when:

- AI tools became powerful enough for finance education
- Competition had not yet emerged at scale
- Student demand for AI skills was exploding
- Traditional publishers were still figuring out digital integration

Three Revolutionary Textbooks (World Scientific Publishing, 2026)

The first finance textbook series designed from the ground up for the AI era:

1. **DRIVER: Financial Management - The AI-Augmented Foundation**

   - **Industry First:** Introductory finance text fully integrating Python and AI from Day 1
   - Progressive scaffolding from novice to practitioner
   - Contract signed October 2025; publication 2026

2. **DRIVER: Financial Modeling - Professional Analytics Mastery**

   - **Industry First:** Advanced modeling text treating AI as strategic partner, not just automation tool
   - Real-world applications validated by student internship success
   - Contract signed October 2025; publication 2026

3. **DRIVER: Essentials of Investment - The Cognitive Gymnasium**

   - **Industry First:** Investment text using AI as "cognitive training partner" rather than calculator
   - Bridges theory with hands-on portfolio management
   - Contract signed October 2025; publication 2026

Market Significance: World Scientific Publishing's commitment to three-book series validates DRIVER as a comprehensive educational platform, not a single course innovation. This establishes the framework as foundational infrastructure for AI+Finance education globally.

Strategic Leadership: 25 Years of Building & Founding

Entrepreneurial Leadership Pattern

Consistent track record of founding and scaling new educational initiatives:

Purdue University | AI Finance Faculty (2025-Present)

- **Founding Role:** Recruited specifically to architect AI finance programs across undergraduate and graduate levels
- Building MSF AI track and DSB-wide AI finance initiatives from ground up
- Student testimonials: "*Everything in the class was basically flawless, which is something I have never said about any other class in my life*"

University of Arkansas | Clinical Associate Professor/Visiting Faculty (2020-2025)

- **Founded Financial Analytics Program:** Built from 0 to 130+ students in competitive market
- **Founded MSF Financial Analytics Track:** Among the first MSF programs deeply integrated with AI and ML
- Elite placement outcomes: Goldman Sachs, JPMorgan, State Street, MasterCard, EY, Walmart Global Tech

Tsinghua University, PBCSF | Executive Director (2014-2015)

- China Family Wealth Management Research Center
- Built research infrastructure at China's premier finance school

Changchun Taxation Institute | Founding Director (2000-2002)

- Established and led east campus ITS Department from inception
- Built technology infrastructure for the specialized institution

Pattern Recognition: Consistent ability to identify market opportunities, secure resources, build teams, and scale operations to institutional sustainability.

Research: Ongoing AI + Finance Research

Citation Impact

- **649 total citations** (496 since 2020)
- **Google Scholar:** https://scholar.google.com/citations?user=BH3MwVAAAAAJ&hl=en
- Strong trajectory in applied AI+Finance research

Current Research Focus

- **AI Applications in Financial Analysis:** LLMs, agentic systems, generative AI
- **Educational Technology:** AI-augmented pedagogy and systematic thinking development
- **Financial Innovation:** AI Finance and digital transformation

Selected Publications and Working Papers

Working Papers:

- **"The Rise of Generative AI in Financial Analysis"** (with Austin Francis) - R&R at Financial Research Letters

  - Demonstrates AI agentic research teams can match/exceed human equity research quality

- **"Cross-Asset Information Diffusion and Return Predictability: Evidence from Corporate Bonds" (with Jun Chen)**

  - Machine learning based bond return predictions

Selected Published Research:

- **Zhang, X.** (2024). "Overcoming Barriers to Teaching Machine Learning in Finance." *Advances in Financial Education* (Accepted)
- **Zhang, H., Wang, Z., Zhang, X.** (2020). "Fire Sales and Liquidity." *Journal of Financial and Quantitative Analysis*
- **Tan, Y., Tian, X., Zhang, X., Zhao, H.** (2020). "Privatization and Innovation." *Journal of Corporate Finance*
- **Zhang, X. and Zhou, S.** (2018). "Bond Covenants and Institutional Blockholding." *Journal of Banking and Finance*

Awards & Recognition

Teaching Innovation

- **University of Arkansas Teaching Innovation Award** (2025) - University-wide recognition
- **FMA Innovation in Teaching Award, Runner-Up** (2022) - Global recognition, one of only 3 finance faculty worldwide
- **Student Designation:** Course declared "the gold standard for all of Purdue" by multiple students

Research Recognition

- **Best Paper Awards Semi-Finalist**, Financial Management Association (2015, 2018)

Academic Positions (Complete History)

Purdue University (2025-Present)
AI Finance Faculty | Mitch Daniels School of Business

University of Arkansas (2022-2025)
Clinical Associate Professor | Sam M. Walton College of Business

University of Arkansas (2020-2021)
Visiting Faculty | Sam M. Walton College of Business

Valdosta State University (2019-2020)
Assistant Professor

Our Lady of the Lake University (2016-2019)
Assistant Professor / Program Lead

Shanghai University of Finance and Economics (2010-2016)
Assistant Professor/Data Center co-Director

Tsinghua University, PBCSF (2014-2015)
Associate Research Professor / Executive Director

Columbia Business School (2013-2014)
Chazen Visiting Scholar

Course Portfolio

Course Development (Purdue University)

AI Finance: Mastering AI for Finance (Graduate/Undergraduate)

- Comprehensive AI integration methodology
- "*Exactly the experience I hoped for when coming to study at Purdue... I genuinely cannot thank the instructor enough for this experience*"

AI Leadership in Finance (Graduate)

- Develop leaders for human+AI teams

DRIVER: Financial Modeling (Undergraduate)

- "*This course is without a doubt my favorite course to date... Everything in the class was basically flawless, which is something I have never said about any other class in my life*"
- "*Please keep using the DRIVER method and the textbook, both were monumental in my learning*"

Previous Courses (University of Arkansas)

Financial Data Analytics I & II

- **Rating:** 4.67/5.0 overall course rating
- 73rd percentile for course quality, 79th percentile for real-life application
- Built program to 130+ students with consistent overenrollment

Advanced Financial Modeling

- **Rating:** 4.60/5.0 overall course; 4.90/5.0 instructor rating
- 82nd percentile overall (top fifth of all instructors)
- 100% of students agreed instructor "displays clear understanding of course topics"

Student Testimonials: Transformative Impact

"*I absolutely love this course. It is exactly the experience I hoped for when coming to study at Purdue... I believe I have gained more practical knowledge that will carry me through my career in this one course than I have my entire career at Purdue. I genuinely cannot thank the instructor enough for this experience; I am truly grateful.*"

"*This course is without a doubt my favorite course to date in my experience as a student at Purdue. It is captivating, extremely well put together, makes me think outside the box, and motivates me like no other class has... Everything in the class was basically flawless, which is something I have never said about any other class in my life. Professor Zhang has been a great teacher the whole way and it's very obvious that he cares about his students and their learning on a different level. This class should be the gold standard for all of Purdue.*"

"*Please keep using the DRIVER method and the textbook, both were monumental in my learning and were great to work with.*"

"*The hands-on implementation of Modern Portfolio Theory using real stock data made the concepts click in a way that theory alone never could.*"

Professional Service & Industry Engagement

Academic Leadership

- **Conference Organizer:** FMA Annual Meetings, Multiple Sessions on ML+Finance
- **Curriculum Innovation Committees:** Leading AI integration initiatives

Industry Partnerships

- **Elite Firm Placement Network:** Goldman Sachs, JPMorgan, State Street, MasterCard, EY
- **Northwest Arkansas Business Community:** Deep connections with entrepreneurs, small business owners, executives at Walmart, Tyson

Selected Speaking & Workshops

- "Transforming Finance Education with Generative AI," FEA Annual Meeting (2024)
- "Fostering Visual Learning and Problem Solving in Finance," San Antonio (2024)

Technical Expertise & Infrastructure Development

Programming & AI Platforms

- **Python:** Expert-level (financial modeling, data analytics, machine learning)
- **AI Systems:** Claude, GPT, Gemini, Custom LLM/Agent implementations
- **R, SQL, VBA:** Advanced proficiency

Educational Technology Innovation

- **DRIVER App:** Custom-built student learning application (in development)
- **Auto-Grader System:** Automated assessment tools for scalable AI+Finance education
- **Digital Curriculum:** Complete Jupyter Book implementations for all DRIVER courses

Finance Tools & Data

- Bloomberg Terminal, CRSP/Compustat, WRDS
- Yahoo Finance API, SEC-API, Alternative data sources

Education

Ph.D. in Finance (2010)
University of North Carolina at Charlotte

M.S. in Mathematics
Youngstown State University

B.S. in Software & Computer Science
Jilin University

Vision Statement: The Future of Finance Education

The financial services industry stands at an inflection point. AI is not coming—it has arrived. The question facing finance education is no longer *whether* to integrate AI, but *how* to do so in ways that enhance rather than erode student capabilities.

The DRIVER Framework provides the answer: a systematic methodology that treats AI as a cognitive training partner, building analytical muscles through structured engagement rather than creating dependency. As these three textbooks reach global audiences through World Scientific Publishing, the goal is establishing DRIVER as the international standard for how finance is taught in the AI era.

Having spent 25 years founding and scaling educational programs across continents, the next chapter focuses on institutionalizing these innovations—building the infrastructure, training the faculty, and creating the assessment frameworks that will enable DRIVER's methodology to transform finance education at scale.

References

Available upon request. Complete teaching evaluations, student testimonials, and research portfolio available in supplemental materials.

"This class should be the gold standard for all of Purdue."
— Student evaluation, 2025