

Friday | February, 14th

# Meet Your Future Signature Work Mentor



# VISITOR CENTER SEATING PLAN

# PROJECTOR ...

EXIT

Table No: 05 - 06

No 05: Joseph Giacomelli

No 06: Kim Hunter Gordon

Table No: 04 - 05

No 04: James Miller

No 05: Joseph Giacomelli

**Table No: 07 - 08** 

No 07: Cristiano Villa

No 08: Konstantinos Efstathiou

**Table No: 11 - 13** 

No 11: Renee Richer

No 12: Luyao Zhang

No 13: Mengqi Wang

**EXIT** 

Table No: 09 - 10

No 09: Pascal Grange

No 10: Paul Weng

Table No: 01 - 03

No 01: Benjamin Bacon

No 02: Ziv Zeev Cohen

No 03: Giovanni Santini

**Table No: 14 - 16** 

No 14: Paula Ganga

No 15: Yeshim Iqbal

No 16: Wumeng He

**WAITING AREA** 



#### Benjamin Bacon - Associate Professor of Media and Arts

#### A Message to My Future Mentees: Hello!

Previous Areas I Have Supervised for SW:

Digital media, design, digital fabrication, new media/contemporary art, installation art, art and design theory and history

My Areas of Interest for SW:

Digital media, design, digital fabrication, new media/contemporary art, installation art, art and design theory and history

Previous Supervised SW Projects Include:

Long Reward Labeling - Nobel Method for Labeling Market Data

for Supervised Machine Learning
Extending the Medium of Live D/VJ Performance from
Entertainment Technology to an Intermedia Storytelling Narrative:
The Practice of We Have Lost Even this Twilight

Application of Brain-Computer Interface: Identification Model of Different Physiological States

#### Cristiano Villa - Associate Professor of Statistics



A Message to My Future Mentees:

I am thrilled about the possibility of supervising your signature work project. I aim to foster a collaborative environment where curiosity, creativity, and critical thinking thrive. I look forward to guiding you through challenges and learning together as we embark on exciting research journeys. Let's make your project a rewarding and transformative experience!

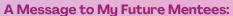
**Previous Areas I Have Supervised for SW:** 

Bayesian inference, statistical modeling, quantitative risk management

My Areas of Interest for SW:

Statistics and quantitative risk management

#### Irina Soboleva - Assistant Professor of Behavioral Science



Sign up for a meeting with me: https://calendly.com/lra Soboleva/office hours



Previous Areas I Have Supervised for SW:

Behavioral science, psychology, political science

My Areas of Interest for SW:

Experiments in self-efficacy, self-determination, and individual innovation

Previous Supervised SW Projects Include:Should We Nudge Judges: The Possibility of Using Nudge to Reduce Implicit Racial Biases in Judicial Behavior

Why Should Companies Care about Their Influences on Consumer Purchasing Decisions? -- Behavioral Suggestions for Ethical Digital

Comparative Value Chain Analysis of Kenya and Rwanda's Coffee Industry: Examining Sector Performance and Governance Unveiling Investor Behavior: Exploring the Interplay of Financial

Literacy and Herding Behavior

(Note: If you have any guestions related to Signature Work, please schedule a meeting with Prof. Soboleva via https://calendly.com/lra Soboleva/office hours.)

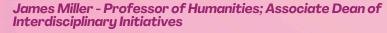


#### Giovanni Santini - Assistant Professor of Computation and Design

A Message to My Future Mentees: May the Fun be with you.

Previous Areas I Have Supervised for SW: VA/AR/XR, sound design, game design, multimedia art

My Areas of Interest for SW: VA/AR/XR, sound design, game design, multimedia art



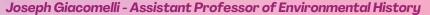


A Message to My Future Mentees:

I am interested in the ideas of smart students, no matter where you come from or what major you are in. I am experienced in mentoring projects that do not fit into conventional disciplinary categories. I enjoy the beginning of the research process in helping students become clearer about what they want to achieve, and also the final stage of the research process, turning A- writing into A+ writing. I like working with students who are independent and self-motivated and who are passionate about ideas. Your major or topic could be anything.

Previous Areas I Have Supervised for SW: Religion, philosophy, Chinese studies, environmental humanities, interdisciplinary studies, qualitative social science

My Areas of Interest for SW: Anything.





A Message to My Future Mentees: Hi! I would be happy to mentor SW projects across a range of fields, especially history and environmental science/environmental studies. Please reach out to me via email (jg498) or in person (AB3207) if you would like to meet to discuss SW mentoring.

**Previous Areas I Have Supervised for SW:** Environmental Science

My Areas of Interest for SW:

History, US studies, GCULS - world history, environmental science/studies, history of science, geography (cultural, historical)

**Previous Supervised SW Projects Include:** 

Do Recycling Nudge Stickers Placed on Packaging and Trash Cans Improve Waste Sorting Behavior in China?



Pascal Grange - Associate Professor of Mathematics

A Message to My Future Mentees: Establish a dialog between exact solutions and numerical methods.

**Previous Areas I Have Supervised for SW:** Probability (data analysis of financial time series)

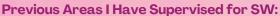
My Areas of Interest for SW:

Statistical physics and applied probability (finance, neuroscience, or complex systems)

#### Kim Hunter Gordon - Assistant Professor of Chinese and **Performance Studies**



If you are interested in researching contemporary or late imperial Chinese culture, translation, or the Suzhou region, I would be delighted to discuss your ideas with you. For those with interests in performance studies or drama more broadly, I have also guided several performance-based signature work projects and would be happy to explore working with you.



Performance studies, Chinese studies, media studies, experimental music

My Areas of Interest for SW:

Performance studies, Chinese studies, Kunqu, global China studies (history), translation

**Previous Supervised SW Projects Include:** 

- At the Train Station an Inquiry into China's Post-Pandemic Society from the Perspective of City Soundscapes
- Your Girl Ray Ray: Exploring Intercultural Femininities on Chinese Social Media

#### Konstantinos Efstathiou - Associate Professor of Mathematics; Co-Director of the Zu Chongzhi Center

A Message to My Future Mentees:

I look forward to working with you on your SW projects, whether your interests lie in abstract mathematics, applications, or interdisciplinary work. My goal is to guide and support you as you explore your chosen topics and navigate the challenges of independent research. If you enjoy hard work and intellectual challenges, I am confident that you will find this process both rewarding and enriching.

Previous Areas I Have Supervised for SW:

In the past five years at DKU, I have had the privilege of supervising a diverse range of SW projects. Many of these were centered on the field of Dynamical Systems and its wide-ranging applications, including the modeling of complex biological systems and the machine learning of dynamical behaviors. However, the student-driven nature of SW has also allowed me to explore projects beyond this area. These include projects in data and time-series analysis with real-world applications such as gerrymandering and stock market trends, as well as projects related to the history of Mathematics and mathematical education.

My Areas of Interest for SW:

I am interested in supervising SW projects in the general area of Dynamical Systems and their diverse applications. In particular, I have a strong interest in studying synchronization and the collective dynamics of complex systems, often inspired by rhythmic biological phenomena. For students with a passion for abstract mathematics, I am eager to collaborate on problems related to my research, which focuses on applying geometry and topology to Integrable Hamiltonian Systems. Additionally, I welcome the opportunity to supervise highquality SW projects beyond these areas, fostering creativity and interdisciplinary exploration.

**Previous Supervised SW Projects Include:** 

- Using Reservoir Computing to Conquer Chaos: Methods and Properties
  Chinese Population Forecast Based on Bayesian Demography
- Reservoir Computing in Dynamical Systems
- Renewable Revolution: Texas' Transition to Renewable Power and **Energy Storage Solutions**





#### Luyao Zhang - Assistant Professor of Economics

A Message to My Future Mentees:

The future belongs to those who boldly bridge disciplines, integrating the transformative potential of computational sciences with the rich complexities of art and humanity, social sciences, natural sciences, and beyond. Just as today's Nobel Prize laureates, Turing Award winners, and other visionaries are reshaping fields where profound traditional insights meet frontier technological innovation, you—the pioneers of the next generation—have the opportunity to drive meaningful change and pave the way toward a sustainable future.

Entrepreneurship is more than starting a business; it is about challenging the status quo, reimagining possibilities, and envisioning a world where art, humanity, and science converge to create social impact. Together, let us embark on a journey to build a sustainable future where knowledge transcends barriers, innovation inspires action, and interdisciplinary thinking unlocks new horizons.

**Previous Areas I Have Supervised for SW:** 

I have supervised interdisciplinary research projects that develop foundational scientific methods at the intersection of computational and economic sciences, focusing on groundbreaking technologies at the frontier. Areas of application include, but are not limited to:

- Art and Humanity Topics: Digital humanities, Diversity and Inclusion in Emerging Market, Digital Art and Media, and Al Governance and Ethics
- Social Science and Economic Topics: Game theory, mechanism design, causal inference on social policy, financial technology (FinTech), and Geospatial analysis on global health.
- Natural and Applied Science Topics: Blockchain and cryptocurrency, Al4Science, human-Al interactions, machine learning for social science, Al model evaluations, and digital technologies for sustainability.

My Areas of Interest for SW:

The frontier of interdisciplinary studies at the intersection of developing fundamental scientific methods and integrating transformative frontier technologies to address cutting-edge challenges in humanity, social, and economic issues.

Examples include, but are not limited to:

- Humanity: Leveraging generative AI and AI-generated content (AIGC) to drive innovation in the creative and cultural economy, exploring ethical frameworks for AI governance and fairness, and advancing digital humanities through the preservation and analysis of historical texts using big data and machine learning.
- Social Issues: Utilizing geospatial analysis and satellite Earth observation data to address global health disparities, investigating human-Al interactions to improve decision-making and accessibility, and applying causal inference to evaluate the social impact of public policies.
- Economic Issues: Designing blockchain-based mechanisms to enhance financial inclusion, employing quantum computing to solve complex economic optimization problems, leveraging AIGC for new business models in creative industries, and exploring the development of the low-altitude economy, including the use of drones and related technologies for transportation and logistics innovation.

Transformative Technologies include but not limited to:

- Technologies for Superintelligence: Brain-inspired computing, brain-computer interfaces, and humanoid robotics.
- Technologies for Earth Observations and Sustainability: Geospatial analysis, remote sensing, satellite imagery, IoT sensors for environmental monitoring, and Al-driven Earth system modeling to tackle sustainability challenges and climate action.
- Technologies for Economic and Cultural Transformation: Algenerated content (AIGC), blockchain, quantum computing, big data, and innovations for the low-altitude economy.



## Luyao Zhang - Assistant Professor of Economics



#### **Previous Supervised SW Projects Include:**

Evaluating Deep Reinforcement Learning for Asset Management in the Crypto Market

Simulations: Applying Queueing Theory to Study Waiting Time in Ethereum Transaction Fee Mechanisms

Cooperative AI in Decentralized Systems: A Multi-Agent

Reinforcement Learning Approach
The Crypton Price Prediction with Different Crypton Rarity Score Models

Al Portfolio Manager: Optimizing Investment Portfolios for Cryptocurrencies by Machine Learning From Intuition to Sense: A Systematic Review of Emotion

Recognition in Conversation with Context-Based Multimodal



#### Mengqi Wang - Assistant Professor of Anthropology

A Message to My Future Mentees:

For students interested in conducting interviews and fieldwork.

Previous Areas I Have Supervised for SW:

Anthropology, economic anthropology and sociology, urban studies, etc.

My Areas of Interest for SW: Urban studies

**Previous Supervised SW Projects Include:** 

Real Estate Industry in Change: A Case Study of Two Developers' Capital Chain Management

A Tiny Funeral of a Seafood Stall: Fang's Body, Labor, and Life "Risk" with Seafood



Paul Weng - Associate Professor of Electrical and Computer **Engineering** 

A Message to My Future Mentees:

I'm looking for self-motivated, resourceful, and hard-working students who are interested in the application of (deep) reinforcement learning, a generic machine learning technique for tackling sequential decisionmaking problems. This approach has notably been exploited in designing AlphaGo or more recently fine-tuning ChatGPT.

**Previous Areas I Have Supervised for SW:** Machine learning, logistics, robotics, finance

My Areas of Interest for SW: Logistics, finance, agriculture



#### Yeshim Iqbal - Assistant Professor of Behavioral Science

A Message to My Future Mentees:

Hello everyone! I am an Assistant Professor in Behavioral Science, with research interests in social/community psychology, mental health and suicide prevention, and the influence our social networks have on our lives! While I'm happy to have your SW project be something closely related to what I'm working on, I would also be happy to help you develop your own ideas into a meaningful project. Looking forward to hearing from you soon!

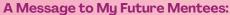
**Previous Areas I Have Supervised for SW:** 

Social/community psychology, mental health, suicide prevention

My Areas of Interest for SW:

Social/community psychology, mental health, suicide prevention, social networks

### Paula Ganga - Assistant Professor of Political Economy



Think about what you are passionate about in political economy and we can find a way for you to examine it in a systematic way.



Political economy (international and comparative) using quantitative, qualitative, and mixed methods research.



Political economy (economics, public policy and political science)

#### **Previous Supervised SW Projects Include:**

- Surviving Covid -19: An Analysis of the Chinese Airline Industry, Based on Linear Regression and Did Model
- Historical Perspective of Economic Underdevelopment in Southern Italy
- From Innovation to Inspiration: A Cross-Comparative Evaluation of the Critical Success Factors of China's Economic Zones



A Message to My Future Mentees:

Come explore the natural world through a variety of mechanisms! I will work to support your growth and experience in your field of interest.

#### **Previous Areas I Have Supervised for SW:**

Plant, animal and microbial physiological ecology, environmental neurotoxins

### My Areas of Interest for SW:

Plant, animal and microbial physiological ecology, environmental neurotoxins

#### Previous Supervised SW Projects Include:

- Cultural Competence in Sexual Perceptions
- Spatial Heterogeneity and Community-Level Functional Analysis of Cyanobacteria Associate Microbiome in Lake Taihu
- Heavy Metal Accumulation in Biofouling Tunicates and Implications for Sustainable Multi-Trophic Aquaculture
- Urban Green Spaces: How do Development and Management Policies Influence Immigrant Socio-Economic Integration?

#### Wumeng He - Assistant Professor of Environmental Economics

A Message to My Future Mentees:

I look forward to learning about your creative ideas.

# Previous Areas I Have Supervised for SW:

Environmental economics and/or policy

#### My Areas of Interest for SW:

Environmental economics and/or policy

# **Previous Supervised SW Projects Include:**

 Application of the Environmental Kuznets Curve in Tracking Urbanization-Driven Wetland Dynamics: A Case Study of the Suzhou Area









#### Ziv Zeev Cohen - Assistant Professor of Digital Media

A Message to My Future Mentees:

Signature Work is more than just an academic requirement; it is a space to push boundaries, challenge norms, merge creativity with critical inquiry, and shape ideas that leave a lasting impact.

- Previous Areas I Have Supervised for SW:
  Design Product design, Sustainable design, Speculative design, Wearable Tech design.
  Art Conceptual art, Sculpture, Installation, Photography, Holography, Moving image.
  Craft Interaction, Kinetic, Light, Digital fabrication, Physical computing.

  - computing.

My Areas of Interest for SW:

Design- or art-related projects focusing on interaction— projects that provoke new ways of seeing human-machine relationships or challenge their existing boundaries.