

# WILL DETER

## SUMMARY

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Dynamic and results-oriented professional with extensive experience in computational modeling, data analysis, and operational management. Proficient in a range of programming languages (including Python and SQL) and analytical tools. Demonstrated ability to leverage data to drive decision-making, improve operational efficiency, and inform strategic planning. Skilled in developing and implementing innovative solutions to complex problems, particularly in the areas of compliance and risk management. Adept at articulating and presenting complex data insights to a variety of audiences. Seeking to apply my analytical skills and technical expertise to solve challenging problems in a data-driven environment.

## EDUCATION

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**PhD** Binghamton University, Systems Science (Anticipated) May 2027

Advisor: Hiroki Sayama  
Research Area: Heterogeneity in Social Computation

**MS** Binghamton University, Systems Science May 2023

Advisor: Hiroki Sayama  
Thesis: Behavioral and Topological Heterogeneities in Network Models of Segregation

**Advanced Graduate Certificate** December 2022  
Binghamton University, Complex Systems Science and Engineering

**BS** Western Carolina University, Emergency and Disaster Management May 2020  
Graduated Summa Cum Laude

## PROFESSIONAL EXPERIENCE

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**YMCA of Western North Carolina** 2013 - Present

Ten years of progressively responsible experience in risk and compliance management roles. Added value through the implementation of custom management information systems and computational modeling of operations and services.

**Senior Director of Operations – Compliance** 2019 – Present

- Implemented computational models of relevant systems to inform organizational strategies for compliance and business development.

- Supported the Association Director of Facilities and Risk Management with systems development, compliance management, and issue resolution associated with youth safety and compliance.
- Contributed substantially to state-level regulatory and legislative advocacy efforts in the licensed childcare space.
- Supervised Child and Adult Care Food Program (CACFP) implementation as a sponsoring organization of 31 affiliated centers with budget responsibility exceeding \$500k.
- Supported the development of grant-funded technical infrastructure for rural childcare operators managing funds exceeding \$100k, annually.
- Managed the departmental compliance unit ensuring an effective compliance program.

**K-12 Director of Operations - Licensing and Compliance**

2017 - 2019

- Supported the success of 34 licensed or otherwise grant-funded childcare facilities serving more than 1000 youth.
- Developed and launched custom, automated management information systems to efficiently monitor and maintain compliance with regulatory requirements.
- Facilitated the licensure of 8 additional school-age childcare facilities.
- Fostered Civic Engagement as an adviser for the Youth and Government Program.

**Director of Operations – Licensing**

2016 - 2017

- Developed and revised policies and procedures to maintain compliance with local, state, and federal regulatory requirements.
- Implemented a revised training program to improve program quality and adapt to new regulations.

**Youth Development Manager – Licensing**

2015 - 2016

- Supported the success of 16 licensed childcare facilities serving over 700 youth.
- Provided technical expertise to ensure superior School-Age Care Environment Rating Scales assessment results.
- Sustained the YMCA of WNC's positive, working relationship with the Division of Child Development and Early Education's representatives.
- Supervised Personnel and Operations for a YMCA Summer Day Camp program serving approximately 90 youth.

**Youth Development Site Director**

2014 - 2015

YMCA Hominy Valley Afterschool

- Managed daily operations and two staff serving 50 afterschool participants.
- Achieved program growth through dedication to program quality and the Y's core values.
- Maintained site-level compliance with local, state, and federal regulations.

- Sustained the program's partnership with Hominy Valley Elementary School.

### **Youth Development Mentor**

2013 - 2014

- Provided out-of-school-time care and enrichment for a group of ~15 school-age children.

### **RESEARCH EXPERIENCE**

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**Thesis**, Binghamton University

2022 - 2023

Behavioral and Topological Heterogeneities in Network Models of Segregation

Advisor: Hiroki Sayama

- Extended computational models of residential segregation to investigate the effect of multiple dimensions of heterogeneity in model specification.
- Articulated novel insights to dynamical processes which aid understanding of residential segregation on networks.
- Presented at NetSci 2023 Vienna

### **PROFESSIONAL TRAINING & CERTIFICATIONS**

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**Disciplined Agile Scrum Master**, Project Management Institute, January 2021

Description: The Disciplined Agile Scrum Master credential holder has been formally evaluated on understanding the fundamentals of agile and lean approaches like Scrum, Agile Modeling, Extreme Programming, Kanban, Agile Data, SAFe and more, in a tailorable and scalable manner.

### **COMPUTER SKILLS**

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**Programming:** Python, Mathematica, Java, C#, SQL, NetLogo, Vensim

**Applications:** MS Office, SharePoint, Teams, Power Automate, PowerApps, PowerBI, ArcGIS