

# Conrad Voigt

(813) 296 - 0977 | [conrad.voigt@gmx.de](mailto:conrad.voigt@gmx.de) | <https://conradvoigt.github.io/>

## EDUCATION

### *Stetson University*

*Deland, FL*

*Bachelor of Science in Applied Mathematics and Economics | GPA: 3.94*

*Expected Graduation May 2025*

- **Honors & Scholarships:** NCAA Division I student-athlete; full-ride academic merit and athletic scholarship
- **Relevant Coursework:** Econometrics I & II, Algorithm Analysis, Real Analysis, Partial Differential Equations, Probability, Mathematical Statistics, Math for Data Science, Intermediate Microeconomics, Intermediate Macroeconomics, Equity Fund Management, Fixed Income Management, Senior Project

### *Saint Leo University*

*Saint Leo, FL*

*Bachelor of Science with Honors in Economics | GPA: 4.0*

*August 2022 to May 2023*

- **Honors & Involvement:** full-ride academic merit and athletic scholarship; NCAA Division II student-athlete; All-Academic athlete; President's Club member

### *State Examination in Jurisprudence*

*Erlangen, Germany*

*Intermediate State Examination | GPA: 11.25 points (top 10%)*

*April 2022 to July 2023*

- **Coursework:** Constitutional Law, Civil Law, Criminal Law, Procedural Law, Administrative Law, Legal Economics, French, Spanish, Arabic
- **Research Project:** "The Margin of Appreciation in the ECtHR's Case Law on Headscarves"

## RESEARCH PROJECTS (full text papers at <https://conradvoigt.github.io/>)

### *Optimizing Prediction: Tailored Sigmoid and LMSR Functions for Polymarket Data*

*August 2024 - Present*

- Analyzes hourly time series data from 371 Polymarket binary outcome prediction markets.
- Develops original modifications of LMSR and Sigmoid models, outperforming Exponential Smoothing in accuracy and explanatory power.
- Plans to enhance model robustness through differentiated data subsets, advanced smoothing techniques, and theoretical analysis involving differential equations and probability theory.

### *Enhancing Ant Colony Optimization for Network Routing Problems*

*October - December 2024*

- Developed novel enhancements to the Ant Colony Optimization (ACO) algorithm, tailored for solving network routing problems with up to 50 nodes.
- Designed and implemented adaptive multi-pheromone systems and dynamic parameter tuning to improve solution quality and convergence speed.
- Created a hybrid ACO model integrating multiple optimizations, achieving superior results with a 15% reduction in path length and a 26% decrease in runtime compared to baseline ACO implementations.

### *The relationship of ESG and IPOs*

*September 2024 - Present*

- Assisting Dr. Imes, Dr. Kouretas, and Dr. McCullough in studying ESG's relationship to IPOs.
- Conducting literature review on ESG-related lending practices to contextualize the dataset and methodology.
- Future Work: Cleaning data, coding and running models, and assist in evaluating regressions.

### *Logistic Regression-Based Systematic Trading: Performance on the S&P 500*

*May 2024 - Present*

- Applied logistic regression to predict S&P 500 stock price movements based on past returns over different periods, achieving an annualized return of 24.61% from 1983 to 2023.
- Utilized a 10-year rolling logistic regression model to adapt to changing market conditions and normalized cumulative returns.
- Outperformed the S&P 500 during the 1990s and early 2000s but underperformed from 2021 to 2024, revealing sensitivity to market changes.

### *The Impact of Employment Protection Legislation (EPL) on Unemployment*

*January 2024 - June 2024*

- Investigated EPL's influence on unemployment across OECD countries (1996-2019) using a two-stage least squares (2SLS) model to address endogeneity.
- Demonstrated a significant positive relationship between stringent EPL and unemployment, with a one-point increase in the EPL index correlating to a 5.52 percentage-point rise in unemployment.
- Controlled for economic and institutional factors and conducted robustness checks to validate findings.

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## Factors Impacting Enrollment in Higher Education

January 2024 - Present

- Presented findings at the Southern Economic Association (SEA) annual meeting in Washington, DC.
- Explores how signaling mechanisms influence enrollment in higher education, using a panel regression model with National Center for Education Statistics (NCES) data (1996-2021).
- models the probability of a 10% drop in enrollment based on institutional characteristics, signaling variables, and competitive positioning.

## PROFESSIONAL EXPERIENCE

### Roland George Investment Program, Stetson University

DeLand, FL

Lead Sector Analyst, Real Estate Sector

August 2024 - Present

- Leads equity research within the real estate sector for a \$6 million student-managed portfolio, preparing in-depth analysis and pitch decks for the investment committee, with valuations based on dynamic DCF models, comparables, asset pricing and macroeconomic models, and Bloomberg data.
- Develops and backtests trading strategies for the Quick Reaction Fund (QRF) team, using statistical techniques on time series such as multivariate and logistic regression to assess predictive accuracy and market responsiveness.
- Applies machine learning techniques to enhance financial analysis and forecasting, continually refining models for improved strategy adaptability and robustness.

### Academic Success, Stetson University

DeLand, FL

Economics Tutor and Econometrics Lab Assistant

January 2024 - Present

- Independently organizes lessons, schedules and content, ensuring effective course delivery.
- Designs and leads tutoring sessions for advanced economics and econometrics, enhancing student understanding of complex econometric methods and statistical modeling.

### Bundestag (German Federal Parliament)

Berlin, Germany

Legislative Aide Intern

February 2022 - April 2022

- Provided direct support to Mrs. Bubendorfer-Licht (Member of Parliament) by preparing & attending meetings.
- Conducted in-depth research and produced reports on various political topics.
- Managed communication with citizens, ensuring clear and effective engagement

### Siemens AG

Erlangen, Germany

Seasonal Production Worker

June 2021 - August 2021

- did manual and technical work integrated into the complex workflows of a factory
- assigned to a production unit for building components for transformers

## LEADERSHIP ACTIVITIES & EXTRACURRICULARS

- Student Athlete Advisory Committee Member** | Advocate for student-athlete welfare and campus engagement
- Volunteer Coach, TV 1848 Erlangen Sports Club** | Mentored youth athletes, focusing on discipline and teamwork
- Event Volunteer** | Assisted in organizing sporting events in Tampa and Orlando

## SKILLS

- Programming & Software:** Python, Latex, STATA, Bloomberg, Excel,
- Methods:** Metaheuristic Optimization, Hybrid Algorithm Design, Time Series Analysis, Multivariate and Panel Regression, Logistic Regression, 2-Stage-Least Squares, Dynamic Financial Modeling and other Econometric Modeling
- Languages:** German (Native), French (Intermediate), Spanish (Intermediate), Latin (Intermediate)

## HONORS & AWARDS

- Academic and Athletic merit full ride scholarship
- Part of the RGIP CFA Challenge Team
- NCAA Division 1 ASUN All-Academic Team
- Dean's Fund Award to Present at the SEA (Southern Economics Association) Annual Meeting
- Presented at the Stetson Showcase Research Symposium (twice)
- ODE Economics Honors Society
- Dean's List, Stetson University (3 semesters)
- Dean's List and President's Club, Saint Leo University (2 semesters)