

## YU-HUNG CHIEN

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### EDUCATION

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#### NEW YORK UNIVERSITY

New York, NY

#### The Courant Institute of Mathematical Sciences

#### M.S. in Mathematics in Finance (expected Dec 2022)

- **Coursework:** stochastic calculus, object-oriented programming in Java, interest rate & FX models, data science and data-driven modeling, fixed Income derivatives

#### NATIONAL TAIWAN UNIVERSITY

Taipei, Taiwan

#### BS in Mathematics and BBA in Finance (Sep 2013 - Jun 2018)

- **Coursework:** calculus, linear algebra, probability theory, scientific computing and numerical methods, differential equations, programming in C and Python

### EXPERIENCE

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#### ASIAN INSTITUTE OF DIGITAL FINANCE, NATIONAL UNIVERSITY OF SINGAPORE

Singapore

#### *Lead of Data Management, Credit Research Initiative Team* (Jul 2020 - Mar 2021)

- Led a team of five analysts to ensure all quantitative models in production were functioning smoothly 24/7, allowing clients to incorporate our models into their production systems
- Coordinated the team to procure, validate, and incorporate new data sources, including negotiating with data vendors, detecting data anomaly, maintaining databases and managing Web crawlers

#### *Research Analyst, Credit Research Initiative Team* (Mar 2019 – Jul 2020)

- Implemented the core Probability of Default (PD) model in Julia that provides daily-updated PDs for over 70,000 publicly listed companies across 133 economies, which is available publicly at nuscri.org with over 5000 registered users
- Developed a country-level stress-testing application covering 88 economies in collaboration with the International Monetary Fund and several central banks
- Initiated the development of pricing models for CDS and corporate bonds, and built a Python API with Flask-RESTful and SQL on Ubuntu, allowing clients to easily gain access to the models

#### *Research Intern, Credit Research Initiative Team* (Feb 2018 – Aug 2018)

- Designed efficient algorithms for Seemingly Unrelated Regression and Structural Vector Autoregression with a reformulation utilizing sufficient statistics, reducing computation time from minutes to fractions of a second for some large-sample cases

#### REPUBLIC OF CHINA (TAIWAN) ARMY

Matsu Islands, Taiwan

#### *Private, Compulsory Military Service, Matsu Defense Command* (Oct 2018 - Feb 2019)

- Volunteered and was selected to be deployed in the mechanized infantry company on a frontline island
- Trained in leadership, discipline, teamwork, time and stress management, risk assessment, military logistics, and infantry tactics

#### INSTITUTE OF MATHEMATICS, ACADEMIA SINICA

Taipei, Taiwan

#### *Mathematical Finance Summer Intern* (Jul 2016 - Aug 2016)

- Conducted research on portfolio tail risk by improving the importance sampling methods in Glasserman et al. (2008) using probability entropy, and successfully reduced the standard error of the estimation of portfolio tail risk as well as the computation time

#### JIH SUN FINANCIAL HOLDING CO. LTD

Taipei, Hong Kong, and Shanghai

#### *Intern, Securities Division* (Jul 2014 - Aug 2014)

- Supported operations in the derivatives team at Taipei, Hong Kong and Shanghai offices

### COMPUTATIONAL SKILLS/OTHER

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**Programming Languages:** Python, MATLAB, Julia, R, SQL, Java

**Other Software:** Bloomberg Terminal and Excel APIs, Git, AWS (EC2, RDS, S3, Route 53)

**Languages:** English (Proficient), Mandarin (Native), Taiwanese (Native)