

## CHIA-EN (JACKLYN) TSAI

ML Research Analyst/ Software Engineer | linkedin: [@jacklyn-tsai](#) | github: [@jacklynchiaentsai](#)

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### EDUCATION:

**Columbia University, The Fu Foundation School of Engineering and Applied Science**

**New York, NY**

*Bachelor of Science in Computer Science, Minor in Economics / Entrepreneurship , GPA: 4.03 , Expected May 2025*

- Relevant Coursework: Computer Networks, Advanced Programming, Econometrics
- Davis Scholar, Columbia Undergraduate Scholars Program

### WORK EXPERIENCE:

**Columbia Build Lab**

**New York, NY**

*Software Engineer*

September 2022 - Present

- Collaborates with PM and other programmers in developing social-network based housing exchange app
- Designs & Develops IOS app back-end Flask API, deploying on AWS EC2 Server
- Constructs robust MySQL user database system

**Columbia Business School**

**New York, NY**

*Machine Learning Research Assistant*

September 2022 - Present

- Works alongside Professor Namkoong in analyzing robustness of ML algorithms in high-risk operations
- Leverages PyTorch framework to implement Reinforcement learning driven decision-making pipeline

**Kang Da Information Inc.**

**Taipei, Taiwan**

*Full-Stack Software Engineer Intern*

June 2022 - July 2022

- Worked alongside other programmers in developing Governmental system software across multiple agencies
- Developed full-stack Governmental Inter-agency Communications System using MSSQL, Java, Javascript, HTML
- Constructed back-end logic for multiple user query features, automating query speed by 15%

**Columbia Data Product Initiative**

**New York, NY**

*Project Manager (Present), Back-End Engineer*

February 2022 - May 2022, Present

- Project: [E-Commerce Aggregator for Eco-friendly Fashion Brands](#)
- Constructed robust E-Commerce database system using MongoDB (webscraping, database management)
- Designed & Developed web app back-end API using Flask

**CyCraft Technology Corporation**

**New Taipei City, Taiwan**

*Data Analyst Intern*

September 2019 - May 2021

- Conducted machine learning analyses to drive instant, accurate cyber threat detection and decision making
- Collaborated effectively with security experts to streamline threat hunting analyses from massive threat data
- Developed [AI Threat Intelligence Analysis System](#) that boosts automatic threat hunting with 90%+ accuracy

### LEADERSHIP:

**Columbia Engineers Without Borders: Uganda Chapter**

**New York, NY**

*Grants & Fundraising Lead, Publicity*

December 2021 - Present

- Directed grants, fundraisers, networked with 60+ businesses & alumni for project funding, raising \$5,500+/sem
- Maintains club's solid presence on social media and campus while facilitating g-body meetings of 40+ members

### SKILLS:

- Programming Languages: Java, Python, C++, HTML, CSS, Javascript ( NodeJS, jQuery ), SQL ( MySQL, MSSQL ) , C
- Strong Written & Verbal Communication, Front-End, Back-End, Project Management, Marketing & Outreach

### PUBLICATIONS & HONORS:

- [CTI ANT: Hunting for Chinese Threat Intelligence](#) —2020 IEEE International Conference on Big Data
- [JP MORGAN CHASE & Co. Software Engineering Virtual Experience Certificate of Completion](#)
- [2021 GiCS National Cybersecurity Competition Champion Team](#)