

# 鄭格承 COLIN CLEVELAND

No.4, Aly. 6, Ln. 132, Dapeng Rd., Beitun Dist., Taichung City 406, Taiwan  
+886 933 539 280 ◊ colin.cleveland.formal@gmail.com ◊ artermi.github.io

## EDUCATION

---

**National Taiwan University (NTU)** Sep. 2014 - present  
B.S. in Computer Science and Information Engineering - Overall GPA: 3.63/4.3 (83%)  
Minor in Economics and Mathematics

**Research Interest:** Algorithmic Game Theory, Graph Theory, and Network Security

## HONORS & AWARDS

---

2018 Taipei City Lion Club Germ Scholarship  
2017 National Science Council Undergraduate Student Research Grant  
2014 National Taiwan University Hope Scholarship

## RESEARCH EXPERIENCE

---

**Research on Algorithmic Game Theory (Prof. Ho-Lin Chen)** National Taiwan University  
Paper Surveying and Discussion Jun. 2018 - present

- Reviewed papers of EC' 18 (the 19th ACM conference on Economics and Computation) and WINE 2018 (The 14th Conference on Web and Internet Economics).
- Analysed time complexity of algorithms that find equilibria in Multi-Preference Stable Marriage Problems with high preference/agent ratio.

**Lab of Algorithmic Research (Prof. Hsueh-I Lu)** National Taiwan University  
Minimum Cut of Directed Planar Graphs Feb 2018 – Aug. 2018

- Reviewed previous minimum cut algorithms and their proofs.
- Combined old algorithms to create new ones, and analysed the complexity of the new algorithms.

**Network Security Lab (Prof. Hsu-Chun Hsiao)** National Taiwan University  
The Vulnerabilities of OAuth in IoT devices Feb. 2016 – Feb. 2018

- Analysed the OAuth standard, and reviewed previous works.
- Tested real world OAuth implementation by Facebook and Google.
- Modelled IoT devices in different situations, and discussed the possibility of threats.

## RELEVANT COURSES

---

<b>Algorithm</b>	Data Structures and Algorithms, Algorithm Design and Analysis, Formal Languages and Automata Theory, Design Strategies for Computer Algorithms, Mathematical Analysis of Algorithms: Number Theory, Generating Functions, Asymptotic Theory
<b>Economics</b>	Economics (I) (II), Microeconomics (I) (II), Macroeconomics (I) (II), Topics in Neuroeconomics, Statistics and Econometrics with Recitation (I) (II)
<b>Mathematics</b>	Linear Algebra, Calculus (I)(II), Discrete Mathematics, Introduction to Cryptography, Applied Algebra (Abstract Algebra), Game Theory Analysis (Honour Program) (I)(II): Basic Topology, Differential Calculus, Integral, Differential Form, Measure Theory, Probability (I)(II): Measure Theory, Law of Large Number, Central Limit Theorem, Martingale, Markov Chains, Ergodic Theorems, Brownian Motion

## WORK EXPERIENCE

---

### **Centre for Teaching and Learning Development**

National Taiwan University, Taiwan

Student' s Tutor

Oct. 2017 - Jun. 2018

- Worked as Programming and Economics tutor.
- Helped to build the old exams' solutions website.

### **Graduate Institute of Networking and Multimedia (INM)**

National Taiwan University, Taiwan

Part-time worker

Nov. 2015 - present

- Worked as the webmaster of the INM web page.
- Repaired the computers and network in the INM office when they broke down.

## SKILLS

---

### **Programming**

C/C++, Java, Python

### **Math/Stats Softwar**

R, Stata

### **Web**

Flask with Python, JavaScript

### **Language**

Mandarin Chinese (native), Taiwanese (native),  
English (IELTS:7(overall),L:7,R:8,W:6,S:6.5)