

# Jun-Wei Lin

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## EXPERIENCE

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### MGM Resorts International

Irvine, California

*Site Reliability Engineer*

Sept. 2021 – Present

- Troubleshoot and debugged cloud-based infrastructure problems on Azure and AWS to address customer inquiries and resolve issues
- Automated cloud provisioning and configuration with .NET Core, Python, PowerShell and Terraform, reducing MTTR (mean time to resolve) from days to hours
- Collaborated with teams to plan and execute maintenance and upgrades; ensured smooth communication and coordination during incidents

### University of California, Irvine

Irvine, California

*Doctoral Researcher in Software Engineering*

Sept. 2016 – Sept. 2021

- Conducted advanced research in software analysis and testing using NLP and machine learning techniques (AI for SE) to improve software quality
- Developed scalable data pipelines to analyze 3M+ GitHub repositories, extracting insights into software trends and best practices
- Published six peer-reviewed papers in top-tier software engineering venues, showcasing exceptional analytical, problem-solving, and written communication skills

### QNAP Inc.

Taipei, Taiwan

*Software Engineering Intern*

July 2016 – Aug. 2016

- Developed automated UI tests with Python, Selenium, and Robot Framework shortening the acceptance testing cycle from days to hours

### National Agricultural Library

Beltsville, Maryland

*Research Intern*

May 2014 – May 2015

- Designed and implemented a queuing system with RabbitMQ and Celery for bioinformatics web services
- Introduced CI/CD practices using Jenkins, Selenium, and JMeter to the development team

## TECHNICAL SKILLS

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**Cloud Platforms:** Azure and AWS Certified Developer

**Systems:** Linux, Windows, Networking (TCP/IP, DNS)

**Backend Engineering:** Django, .NET Core, Swagger, Python, C#, Java, JavaScript, SQL, Kusto, Bash, PowerShell

**Automation Tools:** Docker, Kubernetes, Terraform, Azure DevOps, GitHub Actions, Jenkins, Robot Framework, Selenium

**Monitoring & Logging:** Prometheus, Grafana

## EDUCATION

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### University of California, Irvine

Irvine, California

*PhD in Software Engineering*

Sept. 2021

*Thesis Topic: Advancing Automated Software Testing Through Test Reuse*

### National Tsing Hua University

Hsinchu, Taiwan

*MS in Computer Science*

July 2008

### National Tsing Hua University

Hsinchu, Taiwan

*BS in Computer Science*

June 2006

## PROJECTS (800+ Stars and 440+ Forks on GitHub)

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**PTT Web Crawler (430+ stars and 220+ forks)** | *Python, BeautifulSoup*

- A Python CLI that crawls and parses data from PTT, the largest local online community in Taiwan

**dgpajobs.net (800+ daily active users)** | *Django, Bootstrap, jQuery, MySQL, Docker*

- A Django website hosted on Azure that analyzes government job vacancy data in Taiwan

**Kaggle Competition: Rainfall Prediction (7/126, top 6%)**

- Used ensembles (e.g., Random Forest and XGBoost) and feature engineering (e.g., missing data handling) to predict rainfall on 40K data points of infrared information

## SELECTED PUBLICATIONS (590+ citations on Google Scholar. H-index: 10)

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- ROUTE: Roads Not Taken in UI Testing  
Jun-Wei Lin, Navid Salehnamadi, and Sam Malek  
*ACM Transactions on Software Engineering and Methodology*, 32, 3, Article 71 (May 2023)
- GUI Test Transfer from Web to Android  
Jun-Wei Lin and Sam Malek  
*15<sup>th</sup> IEEE International Conference on Software Testing, Verification and Validation (ICST 2022)* (26% acceptance rate)
- Test Automation in Open-Source Android Apps: A Large-Scale Empirical Study  
Jun-Wei Lin, Navid Salehnamadi, and Sam Malek  
*35<sup>th</sup> International Conference on Automated Software Engineering (ASE 2020)* (23% acceptance rate)
- Test Transfer Across Mobile Apps Through Semantic Mapping  
Jun-Wei Lin, Reyhaneh Jabbarvand, and Sam Malek  
*34<sup>th</sup> International Conference on Automated Software Engineering (ASE 2019)* (21% acceptance rate)
- Web Scraping and Data Analysis with Python (in Chinese)  
Jun-Wei Lin and Hubert Lin  
*DrMaster Press, 2018. ISBN: 9789864343386*

## HONORS AND AWARDS

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Graduate Dean's Dissertation Fellowship, UC Irvine, 2020  
Chair's Award and Graduate Dean's Recruitment Fellowship, UC Irvine, 2016  
Government Fellowship for Studying Abroad, Ministry of Education, Taiwan, 2014