I-Hsuan (Michael) Hu

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Newly graduated developer seeking full-time position in Backend, Full Stack, and Data Science. I have experience with web applications, databases, Linux, statistics, and software development methodology.

+ Technical Skills

Languages:	Python, Java, R, JavaScript, TypeScript
Technology:	Node.js, Docker, Git, Linux, React, Angular, AWS, HTML, CSS, Kubernetes, Django, Maven, SPSS, Data Virtualization, DNA/RNA Sequencing, PCR, DNA/RNA extraction
Database:	PostgreSQL, MongoDB
Other Concepts:	Data Structure & Algorithms, Software Architectures, Statistics, Agile Methodology

+ Experience

Software Engineer Intern at JCN (IBM partner), Taipei   **June 2023 – August 2023**
- Modified and corrected SQL schema in shell script and transferred it from Teradata to IBM DB2
- Created schemas for new tables in **Hua Nan Bank** database system
- Wrote Python script to transfer SQL query, allowing two days of work to be completed within an hour
- Demonstrated ML model solutions to clients using IBM SPSS Modeler
- **Tech stack:** Python, MySQL, Red Hat Linux, IBM DB2, shell script, IBM SPSS Modeler, ML

Project Assistant at National Chung Hsing University, Taichung   **January 2022 – July 2022**
- Collected and prepared samples for statistical analysis
- Prepared DNA/RNA samples for sequencing
- **Tech stack:** Python, R, SPSS, Biostatistics, PCR, DNA/RNA Sequencing, DNA/RNA extraction

Data Analyst at Ecolab Inc., Taipei   **March 2021 – October 2021**
- Analyzed data and evaluated the effectiveness of treatment
- Generated monthly reports to the clients
- **Teck stack:** Python, SPSS, Biostatistics

Second Lieutenant at R.O.C Army, Taipei   **August 2017 – July 2018**
- Being a Platoon Leader and Political Officer

+ Education

M.S. in Computer Science, Stevens Institute of Technology, Hoboken, NJ (GPA 3.8)   2022 – 2024
- Vice President of Taiwanese Graduate Student Association
- Recipient of Graduate Student Fellowship

M.S. in Entomology, National Ching Hsing University, Taichung (GPA 4.1/4.3)   2018 – 2021
- Recipient of Graduate Student Research Fellowship

B.S. in Entomology, National Chung Hsing University, Taichung   2013 – 2017
- President of Entomology Student Association

+ Relevant Coursework   https://github.com/IHsuanHu

CS 546 - Web Programming | JavaScript, Node.js, HTML, CSS, MongoDB, Git
- Used plenty of technologies to do web development, including server-side, database, client-side, and security.

CS 548 - Enterprise Software Architecture and Design | Java, AWS EC2 RDS EKS, Payara, Docker, Maven
- Analysis and design of enterprise software systems, particularly on the recommended architectures.

CS 570 - Data Structure and Algorithm | Java
- Implemented the classic data structures, time complexity, and algorithms.

+ Academic Projects   https://github.com/IHsuanHu

Online Marketplace, CS 546 | JavaScript, Node.js, jQuery, Ajax, JSON, HTML, CSS, MongoDB, Google API
- Implemented system with database, backend, frontend, and UI. Provided platform for people to sell items.
- With photo, meetup time, price, and embedded Google map shown on UI.

URL Shortener | Typescript, Angular 17, HTML
- Implemented webpage to show generated shortened URLs by using popular framework.

Stevens Algorithm Trading Competition 2023 | Python
- Ranked 5 out of 20. Implemented the trading strategy and algorithms; called APIs run in a virtual stock real-world data environment.

Wordle, SSW 810 | Python
- Implemented the game "Wordle". Guess a word with 5 letters with 6 chances.

Study of Code Review Auto Assignment, SSW 565 | Python, PCA, BERT, Word2Vector

- Try to use the statistics method and ML model to assign review work to the reviewers by analyzing its subject.
- With this approach, assigning review work can be easier.

Lost and Found, SSW 540 | Python, Django
- Implement system for Stevens Library. Managed lost items and matched them with owners.

+ Publication

Hu, I. H., Chen, S. M., Lee, C. Y., & Neoh, K. B. (2020). Insecticide resistance, and its effects on bait performance in field-collected German cockroaches (Blattodea: Ectobiidae) from Taiwan. *Journal of Economic Entomology*, 113(3), 1389-1398. https://doi.org/10.1093/jee/toaa053 **(cited by 24)**

Hu, I. H., Tzeng, H. Y., Chen, M. E., Lee, C. Y., & Neoh, K. B. (2021). Association of CYP4G19 expression with gel bait performance in pyrethroid-resistant German Cockroaches (Blattodea: Ectobiidae) from Taiwan. *Journal of Economic Entomology*, 114(4), 1764-1770. https://doi.org/10.1093/jee/toab104 **(cited by 11)**

Hu, I. H., Lee, C. Y., & Neoh, K. B. (2019). Insecticide profiles of field-collected German cockroaches from Taiwan. In Annual meeting of Entomological Society of America, Entomology 2019, November 17-19, St. Louis, MO.