

Dang Nguyen LE

B.Sc. Computer Science, ranked 1st (valedictorian) · Researcher, Faculty of Information Technology, Ton Duc Thang University

Family name	Le	Email	elio.ruanli@gmail.com
Given names	Dang Nguyen	Phone	+84 961 039 450
Date of birth	23 March 2004	Address	Tan Hung Ward, Ho Chi Minh City, Vietnam
Nationality	Vietnamese	Profiles	Google Scholar · ORCID

Ranked 1st of the 2022–2026 Computer Science cohort at Ton Duc Thang University (GPA 8.98/10). First author of three journal articles in data mining and educational machine learning. **Research interests:** data mining, learning from imperfect data, and exact pattern-mining algorithms with provable pruning bounds.

Education

- 09/2022 – 04/2026 **B.Sc. in Computer Science**, Ton Duc Thang University, Ho Chi Minh City, Vietnam
- Final GPA **8.98/10**; **ranked 1st** in the graduating class (valedictorian); graduated in April 2026, one semester ahead of schedule.
 - Thesis: *Solutions to the Problem of Mining Top-K High-Utility Itemsets from Uncertain Databases with Both Positive and Negative Utilities*. Grade **9.1/10**. Advisor: Dr. Chi-Thien Nguyen.
 - Selected courses: Design and Analysis of Algorithms 10.0; Data Structures and Algorithms 10.0; Applied Probability and Statistics 9.6; Linear Algebra 9.6; Deep Learning 9.4; Introduction to Machine Learning 8.9.
- 03/2024 – 09/2024 **Exchange semester**, OTH Regensburg (Ostbayerische Technische Hochschule), Germany; funded by a merit-based TL-Stiftung scholarship.
- 2019 – 2022 **Nguyen Viet Hong Upper-Secondary School**, Can Tho, Vietnam

Publications

Journal articles, first author on all. Published under the name Nguyen Le (in bold). Quartiles: SCImago Journal Rank 2025.

- 2026 **Le, N.**, Lam, T., & Duong, H.-P. Behavioural leakage and the illusion of actionability: a deployment-honest evaluation framework for educational early warning systems. *Expert Systems with Applications*, 333, 134262. Published online 6 Sep 2026 (2027 volume). doi:10.1016/j.eswa.2026.134262 (Q1)
- 2026 **Le, N.**, Vo, H., & Nguyen, T. Best-first search-based approach for mining top-k closed frequent itemsets from uncertain databases. *PLOS ONE*, 21(6), e0351951. Published 17 Jun 2026. doi:10.1371/journal.pone.0351951 (Q1)
- In press **Le, N.**, Vo, H., & Nguyen, T. Exact and heuristic approaches for mining top-k high-utility itemsets in uncertain databases with mixed utilities. *Journal of King Saud University – Computer and Information Sciences*. Accepted August 2026. (Q1)

Research Experience

- 09/2026 – present **Researcher**, Faculty of Information Technology, Ton Duc Thang University
- Appointed after a review of research record. Works with Assoc. Prof. Anh-Cuong Le (Dean of the Faculty).
- 08/2025 – 05/2026 **Undergraduate research project**, student early-warning systems (with M.Sc. Huu-Phuoc Duong and a lower-secondary school in southern Vietnam)
- Obtained an anonymised 675-student Mathematics cohort from the school, with written confirmation of data provision.
 - Showed that common early-warning models select student-behaviour features the school does not yet have when it must predict, so their reported results overstate what can be used for intervention.
 - Designed IC-FS, a feature-selection method that uses only data available at prediction time; its automatic no-leakage check held in every cross-validation fold.

- 06/2025 – 06/2026 **Undergraduate thesis research**, advisor Dr. Chi-Thien Nguyen
- Studied how to find the k most profitable item combinations in uncertain transaction data where items can bring profit or loss. Showed by counterexample that the standard pruning bound gives wrong results here, and derived two correct bounds.
 - Built an exact algorithm (PTK-HUIM, three provably equivalent search orders) and the first heuristic for the problem (UTKU-PSO).
- 09/2024 – 02/2026 **Undergraduate research**, advisor Dr. Chi-Thien Nguyen; started in the course Design and Analysis of Algorithms
- Designed TUFCl, a best-first search algorithm for mining the top-k closed frequent itemsets in uncertain data.

Professional and Teaching Experience

- 2023 – present **English teacher** (part-time), MAC English centre, Ho Chi Minh City
- Teaches primary, lower- and upper-secondary learners.
 - Kept teaching online throughout the exchange semester in Germany.
- 08/2025 – 12/2025 **Intern**, FPT Information System (FPT IS)
- Took part in deploying an information system for the Civil Judgment Enforcement Department of An Giang Province (Ministry of Justice of Vietnam).
 - Internship and industrial practicum both graded 9.5/10.

Honours and Scholarships

- 2026 **Valedictorian**, B.Sc. Computer Science, Ton Duc Thang University
- 2024 **TL-Stiftung Scholarship** for an exchange semester in Germany (merit-based)
- 2022 – 2026 **Academic Merit Scholarship**, Ton Duc Thang University (several semesters)
- 2015 – 2023 **Academic Merit Scholarship**, Vietnam General Confederation of Labour (awarded annually)

Languages, Skills and Interests

- Languages Vietnamese (native) · English (IELTS Academic 8.0, Aug 2026) · German (A2) · Chinese (HSK 3)
- Programming Python, Java, SQL
- ML and data PyTorch, scikit-learn, pandas, NumPy
- Tools Git, LaTeX
- Interests Foreign languages (English since primary school, Chinese since upper-secondary school, German since the exchange). Independent travel: five north–south journeys across Vietnam since 2019; solo trips in Germany, France, Austria and Taiwan.

Referees

- Thesis advisor **Dr. Chi-Thien Nguyen**, Faculty of IT, Ton Duc Thang University · nguyenchithien@tdtu.edu.vn (co-author; published as Thien Nguyen)
- Dean **Assoc. Prof. Dr. Anh-Cuong Le**, Dean, Faculty of IT, Ton Duc Thang University · leanhcuong@tdtu.edu.vn (taught Machine Learning; research collaborator)
- Former dean **Dr. Van Huy Pham**, Dean, Faculty of IT, Ton Duc Thang University (2015–2025); now Vice Dean, School of Technology, UMT · huy.phamvan@umt.edu.vn (taught Digital Image Processing)

Ho Chi Minh City, 6 October 2026

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