|  |  |
| --- | --- |
| **ANH ‘ANDY’ LE**  UB#5883 408 S. Locust Street, Greencastle, IN, 46135  [github](https://github.com/anhTimeLimitExceeded) | [anhle\_2023@depauw.edu](mailto:anhle_2023@depauw.edu) | (765)-712-2183 | |
| **EDUCATION & SKILLS** | |
| **DePauw University** *–* Major in Computer Science, Overall GPA 4.0   * **Honors:** Dean’s List, DePauw’s Merit Scholarship for four academic years. * **Relevant Coursework:** Assembly Language, Artificial Intelligence, Database and File Systems, Computational Discrete Math, Foundations of Advanced Math, Calculus III * **Programming Skills:** (Advanced) Java, C++, Python, SQL, bash, Linux/Unix environments, git.   (Intermediate) Ruby, Ruby on Rails, JavaScript. | Greencastle, IN  BA expected in 2023 |
| **WORK EXPERIENCE** | |
| **Software Developer, Coc Coc Ltd – Largest Vietnamese** [**search engine**](https://coccoc.com/home/en/)*(Spring, Jetty, MariaDB, RESTful API)*   * Maintained Query Parser, a core service written in **Java** that handles tokenizing, correcting misprints, extracting connotation and context, generating related information from 200 queries per second. Implemented new query normalizing mechanism that reduced empty results by 50%. * Developed vertical search microservices for dictionary, textbook homework, video lessons, and Vietnamese spellchecking. These microservices crawled the web using **Jsoup** then indexed data into **MariaDB** using **JPA Hibernate.** Designed triggers for Query Parser to catch queries for these vertical searches with 94% precision. Collaborated with front-end team to coalesce the services into an education-oriented product that serves X queries every day, empowering online tutoring during the pandemic. ([Link to product](https://coccoc.com/search?query=C%E1%BB%91c%20C%E1%BB%91c%20h%E1%BB%8Dc%20t%E1%BA%ADp&tbm=edu)) * Built an API Gateway using **Spring** that routes specific search requests to affiliated partners’ services such as Vietnam Airlines (flights search), Vietnam News Agency (verified news search) for better results. * Created study quiz service that supported **concurrency** in reading and writing into **MariaDB**. Integrated service during students' finals which brought 100.000 new users. | Hanoi, Vietnam  September 2020-  September 2021 |
| **Software Development Intern, DePauw Computer Science Department** *(PyTorch, Coq, Gallina, TreeLSTM)*   * Designed and implemented an Interactive Theorem Prover that helps users create mathematical proofs and program verifications. Integrated the interactive feature of selecting of “proof tactics,” i.e. strategies for combining known facts to progress towards a proof goal. * Worked on a four-person team to use machine learning and natural language processing (**NLP**) to help people predict useful tactics. * Translated proof data into tree structures to fit into a TreeLSTM, a type of recurrent neural network (**RNN**) underlying our **NLP** model using **PyTorch**. | Greencastle, IN  Summer 2019 |
| **PROJECTS** | |
| **Software Rasterizer** *(C++, PixMap)*   * Implemented rasterizing techniques in **C++**, recreating the OpenGL library from scratch to display 2D and 3D vector graphics onto a computer display (source code on [GitHub](https://github.com/andytle/cpp-rasterization)). | Greencastle, IN  Fall 2019 |
| **DePauw Rate My Professor Quick Search Chrome Extension** *(Python, jQuery, JavaScript)*   * Scraped the rating and information of all DePauw professors from Rate My Professor using **Python**. * Created a Chrome Extension using **JavaScript** to show professors’ information upon hovering their names on the school’s courses website (published on [Chrome Web Store](https://chrome.google.com/webstore/detail/depauw-university-rate-my/paaohihajiloonkfjmadnkjonjlhdaac/related?authuser=1) and [GitHub](https://github.com/andytle/rmp-chromeextension)). | Greencastle, IN  Winter 2018 |
| **President, DePauw University Data Science Club** *(PyTorch, Pandas, OpenCV, NumPy, Matplotlib)*   * Achieved first place in the Saint Mary’s Hackathon with a Convolutional Neural Network (**CNN**) in **PyTorch** to classify 14,000 images of mathematical symbols with over 80% accuracy. * Led a three-person team representing DePauw in the International Collegiate Programming Contest (ICPC). Ranked top 50 in the East Central North America Regional. | Greencastle, IN  Fall 2018-  present |

|  |  |
| --- | --- |
| **HOBBIES** | |
| **Languages:** Vietnamese, English (fluent); Japanese, Korean, and Chinese (conversational).  **Interests:** Top 0.2% of the world in osu! – Rhythm-based game with over 10 million players.  Top 0.5.% of the world in Dota – Strategy Multiplayer game with over 1 million players. |