NGUYEN MINH KHOA

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EDUCATION

VinUniversity

Bachelor of Science - Computer Science

Sep 2023 – 2027 (Expected)

• VinUni 80% Merit-based Scholarship

Royal Melbourne Institute of Technology University Vietnam – Cumulative GPA: 4.0/4.0

Honors Bachelor of Engineering – Software Engineering

Oct 2022 – June 2023

Le Hong Phong High School for the Gifted

Honors Mathematics Program

Aug 2019 - May 2022

- Odon Vallet Scholarship, issued by Rencontres du Vietnam 2022
- Scholarship for Talent in Math and Artificial Intelligence, issued by VNUHCM 2022

TECHNICAL SKILL

Programming: C/C++, C#, JavaScript, Java, Python, MATLAB, SQL, Solidity, HTML/CSS

Frameworks/Libraries: ASP.NET Core, Node.js, Express.js, React, JavaFx, Hardhat, Foundry, web3.js **Developer Tools:** Git, Postman, MongoDB, CMake, Visual Studio, Visual Studio Code, Power BI

EXPERIENCE

VinUniversity - College of Engineering and Computer Science

Student Research Assistant

Nov 2023 - Present

- Collaborate on the Trustworthy Federated Learning project, guided by Professor Kok-Seng Wong.
- Conduct a literature review on Backdoor Attack in Federated Learning.

VietUnion Online Services Corporation – Payoo

C/C++ Developer Intern

Nov 2022 – August 2023

- Researched, implemented, and wrote documentation for a C library on POS Machines to read information stored in Vietnamese Citizen Identification Card IC chips using NFC and SAM protocols.
- Developed a highly portable minimal RSA library in C compatible with various POS Machines.

RMIT Neo Culture Tech Club

Project Manager

Nov 2022 – July 2023

- Led a team of four to develop the Club's Landing page using Express.js, Next.js, MongoDB, and Contentful.
- Led a team of four to develop a "Hand gesture controller Flappy Bird game" featured on Club Day with Pygame and MediaPipe.

Le Hong Phong Photography Club

Photographer

Oct 2019 - Aug 2022

- Organized an online First Meeting Event with 200+ participants during the Covid-19 pandemic lockdown.
- Conducted offline workshops to train 15 new members to use Adobe Lightroom and Photoshop.
- Took and edited photos for 12 school events for posting on the club's Facebook page, which has over 30,000 followers.

PROJECT

Ticket Management System – Technical Advisor for Student Association of HCMC University of Medicine and Pharmacy Express.js, MongoDB, Nodemailer, React, Vite

- Independently designed, implemented, tested, and deployed a ticket issuing and management system for internal use.
- Email-based ticket distribution using Excel data integration and real-time ticket checking.
- Successfully operated with over 360 issued tickets and no errors on the C.A.T Workshop day (3/12/2023).

Throttle Valve Controller - Top 2, CodeRace Competition by Bosch

Arduino UNO, H-Bridge Driver, OpenModelica, Pytest

- Developed a PID controller embedded in the Arduino UNO to control the throttle valve to the given set point, which can detect jams, handle abrupt full openings, and autotune the PID constants using the Ziegler-Nichols method.
- Simulated the system with OpenModelica and integrated it with the automation test using Pytest, resulting in 92% accuracy.

AWARD

- Top 1, DApp Track at Winter Ideathon by Web3 Space 2023
- Top 1, Eco-ID Hackathon by Eco Young Leaders Camp 2023
- Top 2, Gateway to Blockchain Competition by Synesis One and CareerLab 2023
- Top 2, CodeRace Competition by Bosch 2023
- Top 2, "Fintech" Challenge by Timo at HackYouth Hackathon 2023
- Top 3, Economics The Vision of You and Me by UEH 2023
- Top 30, RMIT Business Analyst Champion 2022
- Consolation Prize, National Mathematics Olympiad 2022
- First Prize, Provincial Mathematics Olympiad 2022
- First Prize, Provincial Mathematics Olympiad 2021
- Silver Medal in Mathematics, Traditional April 30 Olympiad 2021