RICHARD DUONG
ASPIRING SOFTWARE DEVELOPER

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PROJECTS

Database Development Project   Summer 2020
- Developed a database that maintains historical ticker and options data
  with a 1 minute interval time series to over 500+ stocks
- Automated 200,000+ multithreaded daily requests to yahoo finance and
  to the database using crontab
- Managed and maintained a production server minimizing security risks with
  restrictive port forwarding and ssh-key authentication
- Visualized database aggregations with MatPlotLib and Jupyter Lab
- Optimized CRUD operations by indexing and querying the database efficiently
- Extensively documented on GitBook with metrics

Hardware Design Project   Winter 2020
- Used infrared sensor to record oscillations from blood contractions
- Filtered anomaly values and minimized ambient lighting with tubing
- Programmed the Atmel PU microcontroller in C using state machines
- Wired and debugged breadboard connections

Software Design Project   Spring 2018
- Led a team as the scrum master using scrum agile methodology
- Designed a UI using Qt's framework including a login and canvas window
- Allowed users to create, modify, or remove shapes on the canvas
- Created a login system that maintains persistent storage for user credentials

WORK EXPERIENCE

Vex Robotics Event Partner   Feb 2018 - Present
Vex Robotics

- Aided in hosting an annual robotics competition at my former high school
- Configured raspberry pis to allow contestants to remotely control robots
- Directed a small team to manage the tournament software in a timely manner
- Oversaw lights, cameras, displays, controllers, scoring, scheduling, and much more
- Arranged and formatted the setup for servers, fields, and audience/pit displays
- Increased scheduling efficiency by 14% by carefully managing technical errors
  and minimizing matchmaking delays

Office Assistant   June 2019 - Sept 2019
TicketShine, Inc.

- Fast paced environment with clerical tasks like fulfillments, pricing, and data entry
- Coordinated with a large team for price analysis and placing large market orders
- Created various automation tools for the company to decrease human error

Math Tutor   Jan 2019 - May 2019
Irvine Valley Community College

- Worked with college students and aided them in various topics of math such as
  Algebra, Trigonometry, Calculus, Multivariable Calculus, Differential Equations,
  Linear Algebra, and Statistics
- Taught in math workshops for advanced topics

EDUCATION

Bachelor of Computer Science

University of California, Riverside
Riverside, California
Expected Graduation: 2022

Relevant Coursework

Intermediate Data Structures and Algorithms
Design of Operating Systems
Software Construction (Design)
Formal Automata
Discrete Structures

SKILLS

Languages

English   Vietnamese

Programming

C++   C
Python   HTML/CSS

Other Technicals

MongoDB   Qt Framework
Bash   MySQL
SkQuery

Tools

Vim   MS Visual Studio
Jupyter Lab   VS Code
Docker   Eclipse
Matlab   Atmel Studio

INVOLVEMENT

Buddhist Scouts   2015 - 2019
- Supervised a lion dance team of 15 students
- Coordinated activities for summer and
  winter training camps
- Provided guidance and taught fundamental
  Buddhist principles

Viet Student Assoc.   2019 - Present
- Assisted in setting up VCN, an annual show
- Mentored members in dance and academics
- Participated in VSA Modern, a dance group