Senior software engineer with focus on delivering high quality software products that meet all business needs. Expert in C# .NET, WPF, WCF, gRPC, REST API, SQL Server, Postgres, MongoDB, AWS.

Work History

2022-09-Current

Senior Software Engineer, Quant Development

BP North America, Houston, TX

- Developed new trade model for front office deal data and market data (prices, volatilities, interest rates, etc.) management software with C#, WPF, WCF, Entity Framework, and Microsoft SQL Server.
- Led 3-member backend development team for green field gas trading optimization software with forward and historical market data curves using C#.NET, Python, Postgres with JSONB, and gRPC.
- Acted as business analyst and interfaced with stake holders to define software requirements and design, built UI mocks, and created web frontend prototypes in C# and Blazor.
- Built custom database layer on top of Postgres to support role-based data access, version control, and audit trails for deal data.
- Reversed engineered and translated quantitative trading code in Python to C#.
- Established automated test framework with unit tests, integration tests, and performance tests.
- Worked Agile/Scrum environment with fully automated CI/CD via Ansible & Azure pipelines.
- Trained, mentored, and performed code reviews for team members.

2018-10-2022-09

Associate Software Engineer

JP Morgan Chase, Houston, TX

- Worked as full stack software engineer on internal application that supports over 50,000 users across five continents
- Applied C#, WPF, JavaScript, React.js, Python, and MongoDB in an Agile SDLC using Scrum,

Bao Quoc (Quoc) Pham

Senior Software Engineer

Contact

Address
Richmond, TX 77407

Phone
626-676-1486

E-mail
quoc_pham@msn.com

Skills

C# .NET

Python, JavaScript

WPF, Blazor, ReactJS

gRPC, REST API, WCF

SQL, NoSQL Databases

Microsoft SQL Server

Postgres

MongoDB

AWS

Agile, Scrum

Object Oriented Design

Automated Testing

Azure Pipelines for CI/CD

Git, Make, Bash, Linux

sprints, unit testing with 90%+ code coverage, and SOLID design principles.
- Worked on migration of monolithic WCF back-end to microservices using REST APIs.
- Build front end applications for both desktop and web using WPF, React.js with hooks and Redux, JavaScript, and Node.js with OIDC authentication.
- Built AWS infrastructure with Terraform Enterprise.
- Obtained AWS Developer and AWS Solution Architect certifications on the job.
- Mentored interns and recent graduates and performed code reviews for all team members.

2017-03-
2017-12

Startup Founder

Simplify.ai, Pasadena, CA
- Founded company to provide point-and-click construction, management, and training of deep neural networks
- Created proof of concept software system with co-founder in Python and TensorFlow
- Prototyped 3D artificial intelligent agent in Unity.
- Details of software prototype and product design can be found at http://simplify.ai/.

2007-03-
2016-12

Vice President of Control Systems

eSolar, Burbank, CA
- Built and led a team that developed software system to control solar power generation with computer vision and real-time data acquisition from sensors using C#, .NET, WPF, MS SQL Server, and Entity Framework.
- Acted as technical lead, product manager, and project manager for highly complex software control system that applied computer vision, linear programming, and other applied mathematics to accurately reflect sunlight.
- Designed and implemented various aspects of the control software system.
- Create MATLAB simulations of solar field performance and solar flux on receiver (boiler) panels to assist with receiver design.

2004-08- 2006-08	**Vice President of Technology**

Candeo Technologies, Culver City, CA

- Built and lead a team of 10 engineers to develop search distribution technology for sharewares.
- Acted as product manager and project manager for all software development in company.
- Built and managed web application to track business performance and customer metrics.
- Implemented browser toolbar software system in C++ and Component Object Model (COM).

Additional Experience Available on Request

Various Employers

Education

Bachelor of Science: Economics

California Institute of Technology - Pasadena, CA

Certifications

2024-12	GenAI for Software Development Specialization
2023-11	GenAI with Large Language Models
2021-08	AWS Certified Solutions Architect - Associate
2020-11	AWS Certified Developer - Associate
2018-01	Udacity Artificial Intelligence Nanodegree Program
2017-07	Udacity Deep Learning Nanodegree Foundation

Patents

- Patent 8656907 - Heliostat array layouts for multi-tower central receiver solar power plants
- Patent 7302312 - Hardware abstraction layer (HAL) for a robot