# Alex Nguyen

# **EMPLOYMENT**

# Senior Software Engineer - Blocher Consulting

2014 - Now

- Develop software and orchestrate DevOps for clients using agile or waterfall methodologies
- Managed 5 interns and trained them to the point where they could bill clients
- Manage IT, e.g. IIS, Hyper-V, Active Directory, SSL certs, Cloudflare, Office 365, all Azure resources, etc.

Projects

All projects used C#, Entity Framework (Core), MSSQL

> TheReversalClinic.com

F#, ASP.NET MVC 5, JavaScript

2019 - Now

- Work remotely as Technical Lead on an inherited legacy website
- o Migrated on-premises server to Azure with 0 downtime
- Augmented password security, migrated stored procedures to EF Core, fixed legacy bugs
- o Added property-based tests, waitlist scheduling, automated refunds, and other features
- Exclusively manage DevOps and all Azure resources (e.g. App Insights, SQL VM, Virtual Network, etc.)

## Time tracker and payroll manager

React, TypeScript, ASP.NET Core MVC

2018 - Now

- o Project and Technical Lead of a team of 6. Conduct scrum ceremonies & performance/code reviews
- o MVP released on time with only 2 bugs in first 3 months of use
- o 71% test coverage
- Added Typewriter to automatically convert C# models to TypeScript
- Integrates with QuickBooks, Azure Boards, and Azure Active Directory using their RESTful APIs
- o Exclusively manage DevOps and all Azure resources (App Service, SQL database, DNS zone, etc.)

# "Enterprise resource planning" data migrator

Roslyn, Hangfire

2017 – 2018

- Led training sessions with client's team of 4 in best technical practices
- o Added dynamic migration rules at runtime using Roslyn code generation with correctness safeguards
- o Code may be added/deleted at runtime (e.g. decorators with multiple open generics) via plug-ins
- o Exclusively managed DevOps, CI/CD, and added ClickOnce deployment for legacy apps

## > Kanban board system

AngularJS

2016

o MVP released on time with only 3 bugs in first 3 months of use

> Enterprise asset management system

**WPF, SQLite** 

2015 - 2017

Worked remotely on a team of 10+ implementing MSSQL/SQLite synching

> Cross platform graphing calculator

Xamarin Forms

2014 – 2015

o Added anisotropic scaling, ad support, navbar, transparent graphics (led to PR on a large library), etc.

**Lead Developer – OneHipMom.com** 

MySQL, HTML, CSS, PHP, Prestashop

2012 - 2015

# SOLO PROJECTS

# **Spaced repetition system** at <a href="mailto:github.com/dharmaturtle/cardoverflow">github.com/dharmaturtle/cardoverflow</a>

F#, Blazor

2019 - Now

- Emphasizes social proof and collaboration i.e., "StackOverflow for flashcards"
- 82% test coverage optimized so tests complete in 30-45 seconds despite each test creating its own database
- Independently learned Blazor/F# and persuaded Blocher Consulting's Director of Quality to try F# on a client project where it became the dominant language

# **Machine Learning**

TensorFlow, PyTorch

2017 - 2019

• Scored 97% on Kaggle's Plant Seedlings Classification and solved OpenAI's CartPole and MountainCar via DQN

#### **Twitch Chat AutoModerator** at github.com/destinygg/bot2

C#, Python, Ruby, MySQL

2011 – 2017

- Detected spam, used actor model for speed/scale, and had a W3C valid site with searchable chat logs & statistics
- Exceptionally successful, replacing all (7) other human moderators on a channel with 20,000+ unique visitors

## **ADDITIONAL BACKGROUND**

# University of Illinois at Urbana-Champaign - B.S. in Material Science and Engineering

2013

• Received an A in every math class (Calculus I, II, & III, Diff. Eq., Linear Algebra, Statistics/Data Analysis) **3.6 GPA** Microsoft Certified Professional, native English and Vietnamese speaker, skilled in 3ds Max, AutoCAD, Illustrator, Photoshop