# NATE GRIGG

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Nate has an intuitive creativity that is hard to come by in engineers. Combine this creativity with an uncanny knack for abstraction and you get ingenious technical solutions. Mix in Nate's natural aversion to inefficiency and you end up with truly elegant designs.

## **EXPERT SKILLS**

Nate has expert skills in WEB SERVICES (DJANGO AND FLASK, JAVA, .NET).

But his real passions are in the areas of: MOBILE STRATEGY, and SOFTWARE DESIGN and ARCHITECTURE

## PROFICIENT SKILLS

While he wouldn't claim to be an expert, Nate is proficient in PYTHON, JAX-RS, ASP.NET MVC, .NET CORE, MAVEN, NUGET, PIP, MICROSERVICES, SCRUM, LEAN DEVELOPMENT, and OXFORD COMMAS

## **CURRENT PROJECT**

## MAGiE: MAGnetic Interactive Explorer

#### Nov 2018-Present

Nate just released a mobile game, built using the <u>UNITY</u> game engine with C# scripting. He has built a <u>small library</u> for the underlying bit manipulation and used <u>NUGET</u> to manage that dependency in the <u>UNITY</u> project. Working on his Mac, he has learned about <u>DOTNET CORE</u> and he has been learning the <u>JETBRAINS RIDER</u> IDE to make his life easier.

While managing beta tests and releases, Nate earned a new respect for continuous delivery and release management!

The game is called MAGiE, short for MAGnetic Interactive Explorer. The premise is

that you have this device that reads binary data from a mag-stripe like on a credit card. The game then presents you with puzzles where you have to decode the bits to read a message, or encode bits to answer a puzzle.

It's lots of fun, you should try it!

https://magiegame.com/magie/

## PAST MOBILE PROJECTS

## REST endpoint to provide mobile app with content from Sitecore Content Management System

#### 2014

While working to convert the main website from SHAREPOINT 2010 to the SITECORE content management system (CMS), a new feature was being developed in the company's native mobile apps. Nate quickly exposed content from the CMS as JSON output so the mobile developers could deliver their feature on time.

## Mobile Web Application for booking flights

#### 2010-2012

Nate built a prototype MOBILE WEB APPLICATION for making airline reservations using *Navitaire's* NEW SKIES reservation system. One of Navitaire's major European customers needed a mobile booking flow *yesterday*. Nate proposed polishing the prototype web app and the customer agreed.

During the polishing project, the CEO of the Airline insisted that the mobile booking flow be accessible from ANDROID and IOS apps in the app stores. While development continued on the mobile web app, developers working for the airline built native apps with web controls to wrap the mobile web app.

## <u>US Patent 8942991B2: Agent-side traveler application for mobile computing devices</u>

## Application Filed May 2011

This patent illustrates Nate's ability to reduce complexity. Here, the steps of finding a bus route, selecting a destination, booking a ticket, and collecting payment are reduced to a single swipe of a credit card.

## Mobile Game in the Windows Phone marketplace

#### 2011

Nate and a friend developed and released a puzzle game to the WINDOWS PHONE marketplace. Nate found many exciting technical challenges including programming animations and subtle interactions in the WINDOWS PHONE flavor of SILVERLIGHT.

Releasing the MINIMUM VIABLE PRODUCT taught Nate and his friend a lot about PROJECT MANAGEMENT and PRIORITIZATION. While they hoped for greater success for the game, the lessons learned were well worth the effort.

## SOFTWARE ENGINEERING WORK HISTORY

## Senior Software Engineer, ReliaQuest

Aug 2021 - March 2022

JAVA MICROSERVICES with SPRING BOOT and SPRING JDBC deployed to AWS

## Principal Software Engineer, Newfold Digital (Bluehost)

Dec 2019 - Aug 2021

PYTHON MICROSERVICES for new initiatives as well as starving Bluehost's monolith

### **Content Recommendation System**

**REST MICROSERVICE** in **DJANGO** to recommend helpful links (such as knowledge-base articles) to customers at various locations in <u>Bluehost's</u> web apps.

The service was so helpful and easy that the marketing team decided to use it to show BLACK-FRIDAY OFFERS to existing customers.

### Website Builder Authorization Service

FLASK microservice that signed JSON WEB TOKENS (JWT) to authorize users of Bluehost's new Website Builder for WordPress sites.

## Website Builder API Gateway

FLASK microservice to front calls to <u>Bluehost's</u> monolithic Hosting Platform.

## Developer, Personal Project

Nov 2018-

See MAGiE above

## Senior Software Engineer, Ancestry, Inc.

2015-2018

## Monolith BreakUp and conversion to Micro Services

#### Commerce department at Ancestry

Nate worked on replacing a suite of monolithic .NET services with Java MINIservices. Aiming to build MICROservices, the team ended up building services that were a little larger than intended. So, while breaking up the MONOLITH, the team also worked on breaking the MINIservices into MICROservices. The team also spent the last year

"lifting and shifting" all of these services (MICRO, MINI, and MONOLITHIC) to the AWS cloud.

All this while implementing new features and helping the team raise their standards for software excellence.

## Java 8, JAX-RS, REST, Micro-Services, Spring Dependency Injection, Maven Senior Software Engineer, Intermountain Healthcare

2014-2015

Non-Profit Healthcare Provider

Nate worked with the web team implementing the company's main user-facing web site.

Sitecore Content Management System (CMS)

Senior Software Engineer, RedBell Real Estate

2013-2014

Real-Estate Services company

ASP.NET Web Forms

Senior Consultant, Application Development, Avanade Inc.

2006-2013

IT Consulting joint venture from Accenture and Microsoft

Most of Nate's time with Avanade was spent in Professional Services at Navitaire, an airline reservations company. Navitaire Professional Services assists airlines with implementation and customization of Navitaire's reservations platform. Nate mostly worked with airline web developers customizing various aspects of their booking flow.

## Software Developer in Test, Control4

2004-2006

Home-automation startup

Testing hardware and software at a home-automation startup.

Embedded Linux, C, C++, Custom Test Automation Software in C#

Software Engineer, ThoughtLab

2002-2004

Custom web applications

ASP.NET 1.0, 1.1

## **EDUCATION**

Bachelor of Science, Computer Science University of Utah

2002-2006

**Utah State University** 

1997

Salt Lake Community College

1996-1998

work in progress... more to come.