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## EDUCATION

**University of Massachusetts Amherst**

May 2019

**BS Computer Science**

**Commonwealth Honors College** – GPA: 3.78, departmental honors thesis project

**Coursework** – data structures, functional programming, computer systems, probabilistic reasoning, discrete math, algorithms, databases, web programming, software engineering

**University of Massachusetts Amherst**

December 2020

**MS Computer Science**

**SKILLS** (in order of proficiency)

**Languages:** Java, Elixir, C#, Python, TypeScript, Bash, SQL, JavaScript, HTML/CSS, C

**Software:** Linux, Docker, LaTeX, Visual Studio, Git, Microsoft SQL Server, MongoDB

**Frameworks:** Phoenix, Ecto, OTP, React, Webpack, Scipy, Numpy, Express

## EXPERIENCE

**DraftKings** – Developer Intern

June – August 2019

- Rearchitected and refactored existing CSV lineup importer for high-value clients from scratch to report better errors and fail gracefully
- Designed new importer to integrate with existing network of microservices with minimum interference
- Reformulated data model to fix existing problems, data reporting errors, and silent bugs
- Provided internal dashboard with flexible views for customer service to quickly evaluate and solve problems for high-value clients

**Charles River Development** – Developer Intern

May – August 2017, 2018

- Repaired critical bugs and worked in both C# and Java in large, complex codebases with version control
- Increased test coverage dramatically for localized currency features and benchmarks
- Wrote and fixed automation tests for portfolio manager and performance UI
- Designed and created automated testing infrastructure through a custom continuous integration platform
- Emphasized critical factors and added sorting features to tree-structured performance reporting

**O'Shaughnessy Asset Management** – Developer Intern

May 2016 – August 2016

- Implemented custom report builder using pivot grids
- Refactored and fixed existing bugs in relationship manager interface
- Migrated interface for portfolio managers to manage account restrictions from Windows forms to MVC
- Presented crucial company asset information using Kendo UI, Microsoft SQL Server, and .NET MVC 4

## PROJECTS (selected available on GitHub)

**AAUStats.com** – Analytics for high school basketball (Elixir/Phoenix/Postgres)

December 2016 – Present

- Design custom charts, graphs, and visualizations for assessing team and player performance
- Established system for importing unreliable data and outputting structured data models to Postgres
- Implemented fully-featured API for accessing structured data using JSON endpoints
- Created interactive, React-based tables for statistical reporting

**Flexible Phoenix Deployments** – research available on GitHub Gist (text)

February 2018

- Researched and assessed current release strategies for multi-tenant Elixir/Phoenix apps
- Developed flexible solution to managing releases and deployments on a single server
- Capitalized on container technology to eliminate dependencies and version requirements
- Determined strategies for containerized multi-app networking using NGINX containers
- Included support for database migrations, data imports, and other one-time tasks to run in parallel