

James McCarthy

Software Engineer



About

📍 New York City New York US

✉️ jmccarthyns92@gmail.com

📞 (516) 697-0442

🌐 James McCarthy

🐙 jmccarthy92

Summary

An innovative Software Developer with 6 years of experience in web-based technologies who demonstrates excellent leadership and communication skills. Experienced in agile methodologies and the software product lifecycle. A firm believer in delivering high-quality software through the use of behavior-driven development applying SOLID principles to guide design patterns.

Experience

Brkfst.io

01/2020 - Present

Lead Backend Developer

- Lead Backend Developer of one of the top UGC content generation platforms: BRKFST allows brands to source the most performant media assets to be used for advertising on paid and organic channels. As Lead Developer, I helped build and lead the software department that was spun-off from WITHIN. I was responsible for the architecture, development, and maintenance of the services that power the BRKFST platform.
- Introduced Terraform Infrastructure as Code, Terraform Cloud, and Azure Pipelines YML files into all projects for scaling and deploying Azure services. Increasing developer experience by providing transparency into running infrastructure and established version-control for service updates.
- Spearheaded the creation and development of Azure Function Apps to handle asynchronous backend processes to reduce system complexity. Enabling continuous deployment and decreasing the time needed to deliver features by 50%.
- Integrated Docker into Azure Pipelines to build and deploy containers to Azure Container Registry for deployment to Function Apps. Providing a highly configurable Azure Function environment and reducing the time required to deploy changes.
- Utilized a microservices approach to implement the application's media processing system using Azure Functions written in TypeScript. Used Azure Blob Storage and the Event Grid to trigger the system upon file upload and integrated SignalR to broadcast output to connected clients via WebSocket.
- Built scalable Node.js web services in Typescript using Express to handle a high-volume of concurrent requests from client applications. Secured web services through the use of authorization with JWT.
- Deployed a client-side application built with React using TypeScript(TSX) to create a highly interactive and performant user interface.
- Enforced behavior-driven development through unit, integration, and end-to-end testing to match acceptance criteria defined in user stories. Decreasing the amount of bugs created each sprint and reduced overall tech debt.
- Lead a team of developers using a scrum/Kanban hybrid Agile methodology to plan, design, configure, and test web services for CI/CD.
- Streamlined scrum workflow by maintaining daily stand-ups, sprint planning, spring retrospective, employing Kanban story boards, managing blockers and formulating actionable items for release deliverables.
- Conducted formal code reviews for the team, enforcing best practices in Object-Oriented design through SOLID principles. Which increased the defect detection rate by 20-30% compared to unit & integration testing.

Backend

Advanced

TypeScript Node.JS

ExpressJS

RESTful Architecture

Multi-layer Architecture

Microservices Architecture

Databases

Advanced

PostgreSQL MS SQL

MongoDB CosmosDB

ORM ERD Modeling

Frontend

Intermediate

TypeScript React

React Hooks Redux

HTML5 JSX SCSS/CSS3

Infrastructure

Intermediate

Azure Azure Pipelines

Azure DevOps

Azure Event Grid

Azure Blob Storage

Azure Storage Queues

Azure Functions

Serverless Terraform

Docker

WITHIN

07/2018 - Present

Full Stack Developer

- Maintained backend legacy code built in Ruby with Ruby on Rails to automate the daily workflows of the digital marketing team.
- Built client-facing dashboards and tools using React for tracking brand metrics across multiple advertising platforms, these included: Facebook Advertising, Google Ads, Google Analytics, Search Ads 360, Display & Video 360, Snapchat Ads and Amazon Advertising
- Created an ad-pruning tool for Facebook Ads Manager utilizing Facebook Marketing API to remove the bottom-performing ads from an adset using filters provided by the user; Provided a React front-end form using Formik for handling user input.
- Set up Google Tag Manager for brands to easily create tracking tags, triggers, and variables for various platforms.

Open Source Projects

Project

Intermediate

Git Flow

Agile-development

SOLID Design Principles

OAS (Swagger)

Behavior-Driven
Development

Domain Knowledge

Intermediate

Digital Marketing

Facebook Marketing

Google Ads

Google Tag Manager

tiktok-api-brkrfst · <https://www.npmjs.com/package/tiktok-api-brkrfst>

NodeJS Wrapper for the TikTok Marketing API

TypeScript Node.js Azure Pipelines

- Lightweight API built for ease-of-use.
- Succinct TypeScript definitions provided.

Gif Collage · <https://client-gifcollage-prod.azurewebsites.net/>

Serverless Node.JS web app that creates a Gif-Collage using user-provided uploads.

Azure Functions React Serverless TypeScript Node.js Terraform SignalR Event Grid
CosmosDB WebSockets

- Uses the Azure Event Grid to trigger Azure Function upon file upload.
- Integrates CosmosDB NoSQL storage for saving Blob Storage URLs and file metadata.
- Utilizes WebSockets protocol via SignalR to stream newly uploaded files to the Collage for connected users in realtime.
- Backend Github: <https://github.com/jmccarthy92/collage-backend>
- Frontend Github: <https://github.com/jmccarthy92/collage-client>

Education

SUNY Old Westbury

09/2015 - 07/2018

Bachelor of Science in Computer Science
3.91

Awards

Summa Cum Laude

SUNY Old Westbury