# **MATT CROOK**

## Full Stack Software Engineer



#### **About**

Prior to becoming a software engineer, I was involved on the technical side of the Music Business in project management, data analytics, and development. I am incredibly passionate about what I do, as I get to solve problems every day! I have had the pleasure for the last three years of working on a nationally recognized team for innovation and being on the cutting edge of technology in the Music Business. I am self-motivated, productive, accomplished individual with a dedication to working towards ambitions. As an organized team member, I enjoy working with new people as well as established groups. I am a fast learner when it comes to new tasks with strong analytical, planning, and problem solving skills. For more information about me, as well as my portfolio, please visit my website, which is listed above.

## **Skills**

- JavaScript
- React
- Python
- SQL
- Jest/ React Testing Library

- Power BI/ Power Query
- Git
- Node
- Tableau
- Docker

- Django
- Kubernetes
- · Google Cloud Platform
- Hadoop
- CMS/ Headless CMS

### **Education**

Full-Stack Software Developer Nashville Software School **BA, Music Business and Business Management**Belmont University

## **Experience**

#### **Nashville Software School**

Full-time immersive Javascript/ Python Bootcamp

2020- Current

Six-month full-time immersive Python/Django bootcamp focused on hands-on, fast-moving and rigorous study of software engineering. Emphasis is placed on building database driven applications, and working with other students while immersed in new and challenging material.

#### Highlights Include:

- · Computer Science fundamentals, algorithms, operating systems and security
- Test-driven development.
- Implementation of CRUD principles with persistent data storage (API)
- Front end (HTML5, CSS, and Javascript, React)
- Node.js with MongoDB, as well as JavaScript fundamentals leveraging DRY, modular, readable code and reusable components
- Back end (Python, Django and SQL)
- Pair Programming

#### **PROJECTS**

#### **Quantum Coasters**

Full-stack React frontend and Django Rest API backend application. Includes full CRUD functionality using AuthO as third party authentication and JWT token authorization. Jest and React Testing Library used for unit, component, and integration testing, and frontend built using the React Context API. App is deployed using Vercel.



#### **Quantum Management**

Full-stack application built with Python using the Django framework. App acts as a admin/ management tool for employee management, data analysis with data visualizations, business forecasting and operations management functionality, and business intelligence capability for analysis and business decisions.



#### **Data Analyst - Income Tracking Analytics**

Bertelsmann Music Group, Nashville, TN

BMG is a new kind of music company. The mission is clear; to help artists and songwriters make the very most of their songs and recordings in the digital age. That's why BMG's business model, labeled Project Sound, vows to blur the lines between a modern music company, and technology company. As a data analyst at BMG, I gained experience working in a rapidly changing and demanding environment, where my role touched nearly every other department in the company. My responsibilities in redirection, live performance tracking, mechanical tracking, radio tracking, pipeline analysis and forecasting would contribute to over \$5 million dollars recovered annually. In addition, I worked regularly with large data in Hadoop, and later Google Cloud, utilized the underlying platform services and infrastructure with Kubernetes, wrote scripts to fetch data using various API's, and worked directly with our developers to build tools, apps, and automate processes, and am familiar with working in and with the ETL process.

- Managed redirection of BMG deals by building a thorough plan to implement with high attention to detail. Increased automation of
  process, therefor increasing number of notices sent and yearly income received in collections as a result of redirection from an average of
  \$800k to over \$1.5 million YOY.
- Project Manager for creating Live Performance Tool. Worked with developers from inception to implementation and roll out. Live Performance Tool negated the need to manually input data for set-list registration, pulling necessary info automatically and consolidating it from various sources into a data base in **Hadoop**. This improvement in automation provided a 925% increase from 40 set-lists submitted in 2017, to 410 submitted in 2018.
- Successfully implemented plan to resolve manual data entry and data access issue, by using knowledge of API's to exploit third party
  services to by pass front end of application to call the SoundExchange API, fetching data using JSON to better access song meta data for
  specific departmental needs.
- Worked regularly with large amounts of data and regularly accessed, manipulated, and extracted data from data base systems like **Hadoop**, using software like **Tableau**, and open-source **SQL** engines like Apache **Hive** and **Impala**.
- Performed radio tracking and analysis for songs that have BMG interest using BMG's radio airplay API and Nielson driver files.
- Managed projects such as activity requests, projections and business forecasting, as well as client inquiries using JIRA.
- Worked closely with creative management on potential deals by performing pipeline analysis to determine value of specific artist, entity, or catalog for advance, purchase, or acquisition.
- Worked closely with, and was lead analyst on multiple projects with creative management on potential deals by performing pipeline
  analysis and business forecasting using in-house custom forecasting tools to determine the value of specific artist, entity, or catalog for
  advance, purchase, or acquisition.

## Business Operations Analyst

2016 - 2016

Broadcast Music Inc. (BMI), Nashville, TN

- Worked regularly with extracting, consolidating, and analyzing data with tools such as Power BI for easy use and readability by and for internal stakeholders.
- Provided assistance to project teams to plan and execute their work and to identify and resolve issues.
- Maintained a working knowledge of BMI data base, systems, programs, policy and procedures, forms, documents and requirements for writers and publishers.
- Sorted out problems for affiliates using online service accounts. Extracted, cleaned, and manipulated large datasets (structured and unstructured) for analysis.
- Developed an in-depth understanding of customer needs and desires through the use of data and survey tools.
- Improved the understanding of the impact of BMI actions on songwriters and related business outcomes.
- Communicated (written and verbal) insights from quantitative analyses to technical and non-technical audiences.

Project Manager 2014-2016

The Holland Group, Nashville, TN

The Holland Group is a global artist management company based in Nashville, TN. As a junior project manager, I facilitated and implemented the needs of the Artist Managers by working to build the brand of artists by using modern ways to connect with fans and grow exposure. Using social media, I created and managed projects, including content, according to the brand of each specific artist and their target audience.

- Responsible for pre-project planning, project kickoff facilitation, creation of project plan, overseeing successful execution of project plan with timely communication to all project stakeholders, optimizing communication through face-to-face discussions, meetings, email, chart preparation and other techniques.
- Collected Soundscan data to create reports based on information gathered to give to management and prepared and project progress/status reports for management review.
- Worked alongside Management team to communicate deadlines effectively, having an understanding of time constraints and deliverablesCoordinated with tour manager, publicist, manager, and PR to effectively create weekly reports on artists to send to label executives in New York City.
- Gained experience with Migration Teams and how to work with various teams.
- Proactively recommend and advocated for solutions to enhance efficiency of processes. Kept all teams informed of project status and proactively communicated any challenges that put a project at risk. Ran and managed social network sites of artists/ built them as a brand with the use of social media.

**Tour Manager** 

2013-2014

The Holland Group, Nashville, TN

- Daily tasks included booking/ handling all legal paperwork including: the date of the show/settling the club offer, appearance
  agreement, and artist agreement/ as well as creating and sending in a rider and addendum/ handling the split after the show and
  payout.
- · Assisted in administrative duties and data input, tour scheduling, and logistical responsibilities.