# **Jack Denson**

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#### **EDUCATION**

## Northeastern University, Boston, MA

Aug 2019 - Expected May 2023

- Khoury College of Computer Science, Honors
- Candidate for a Bachelor of Science in Computer Science
- Overall GPA 3.93/4.0, relevant course GPA 4.0/4.0
- Relevant Courses: Algorithms & Data Structures, Object-Oriented Design, Mathematics of Data Structures, Foundations of Data Science, Foundations of Cybersecurity, Linear Algebra, Mathematical Reasoning, Fundamentals of Computer Science(I and II)

### **TECHNICAL KNOWLEDGE**

Languages: JavaScript, Python, Java, SQL, Bash, Groovy, R, HTML, CSS

**Technologies/Frameworks**: Git, Vue.js, Node.js, React.js, Docker, Jenkins, ElasticSearch, PostgreSQL, Express.js,

NumPy, Pandas, TensorFlow, JUnit, Socket.io

Cloud Services: AWS EC2, AWS S3, AWS Batch, AWS Cloudwatch, AWS ECR, AWS RDS, AWS Redshift, AWS IAM,

AWS ElasticSearch, AWS Lambda

Applications: Jira, Atom, Jupyter Notebooks, Git Bash, Spyder, Eclipse, IntelliJ, Adobe Photoshop, Microsoft Office

**Systems:** Linux, Windows

#### **EXPERIENCE**

FogPharma, Cambridge, MA

January 2021 - July 2021

Data Engineering Co-op

- Developed and shipped data analysis pipeline, shifting all internal computation to the cloud while emphasizing scalability, speed, and modularity
- Implemented and executed ETL scripts to normalize complex, heterogeneous Excel data into a scalable, organized, and optimized SQL database with tens of millions of rows
- Designed and implemented full-stack data search application, allowing scientists to search, filter, browse, visualize, and interact with company data previously only available via thousands of Excel sheets

#### Muffin House Cafe, Mendon, MA

April 2018 - Present

#### Barista

- Interfaced with 75 100 customers daily, taking orders and making coffee to ensure customer satisfaction through friendly interactions
- Trained 5 10 new employees to ensure success in the workplace

## Computer Science Gents, Marlborough, MA

February 2018 - April 2019

#### Mentor

 Offered personalized teaching to twenty 11-13 year old students, introducing software development principles to build an Android application of their design

## **PERSONAL PROJECTS**

#### **Machine Learning Photo Watermarker**

July - September 2020

- Built steganographic "watermark" tool using machine learning, subtly altering photos by adding a robust and invisible watermark
- Designed front-end site and integrated a back-end API to alter photos
- Utilized Python(Tensorflow, Flask), and Javascript(React) to build the tool

## Image to PDF REST API

December 2020

- Built API(Node.js, Express.js) to dynamically convert jpg images to a single, multipage pdf
- Plan on integrating with the Twilio API, to enable seamless pdf creation from my cell phone

## Personal Website

January 2021

- Designed and built personal website using React.js and Material UI
- Deployed on AWS Amplify, enabling continuous deployment via a Git repository

## **SKILLS/INTERESTS**

- Interests: movies, cooking, staying active, machine learning, web development, and learning new skills
- Skills: productive, friendly, collaborative, goal-oriented, and hardworking