James Brady

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Links

Github:// **jbd95**
Website://**jamesrbrady.com**
LinkedIn:// **jbd95**

Education

B.S. IN COMPUTER SCIENCE
The University of Texas at Arlington
GPA: 4.0
Expected Graduation: Spring 2021

Skills

LANGUAGES
C#, C++, C, Python, JavaScript, Java, SQL

FRAMEWORKS & LIBRARIES
React, xUnit, Moq, Unity3D, Express.js

DATABASES
MySQL, MongoDB, Google Firestore

AMAZON WEB SERVICES
.NET SDK, CloudFormation, EC2,
RDS, APIGateway

PROFESSIONAL INTERESTS
Algorithms, Cloud Computing,
Back end, Operating Systems

Coursework

Algorithms and Data Structures
Operating Systems
Artificial Intelligence
Theoretical Concepts in Computer Science
Databases
Discrete Mathematics
Linear Algebra

Achievements

- Won 1st place and Best Use of
  Snap Kit at MLH HackHouston 2019

- Won 1st place and Best Mobile
  Project at HackSMU 2019

Work Experience

SUMMER 2020   **Double Line**   **Software Engineer Intern**
- Developed a cost-effective dynamic schedule-based scaling system for AWS EC2, RDS and AutoScalingGroup instances using C# and the AWS .NET SDK
- Deployed an APIGateway REST API, secured with key auth and IP address white-listing, and created an interface to manage scheduling of instances
- Created a build pipeline using GitHub actions to automatically deploy artifacts to AWS S3
- Ensured system integrity by designing realistic unit tests using xUnit and Moq testing libraries
- Aggregated data from multiple tables into XML files using SQL queries

Research Experience

2017 - NOW   **Heracleia Lab**   **Undergraduate Research Assistant(REU)**
- Implemented an interactive game in Unity3D, facilitated by a robotic arm controller, to pipeline cognitive engagement and physical fatigue data for statistical analysis
  - Citation: Rajavenkatanarayanan, A., Kanal, V., Tsiakas, K., Brady, J., et al. (2019, June). Towards a robot-based multimodal framework to assess the impact of fatigue on user behavior and performance: a pilot study. In Proceedings of the 12th ACM International Conference on PErvasive Technologies Related to Assistive Environments (pp. 493-498).
- Developed wearable application to unobtrusively pipeline physiological and mood annotation data for predictive analysis of the user's mood
  - Citation: Lietz, R., Harraghy, M., Brady, J., et al. (2019, June). A wearable system for unobtrusive mood detection. In Proceedings of the 12th ACM International Conference on PErvasive Technologies Related to Assistive Environments (pp. 329-330).

Projects

SPRING 2019   **Blaze Online Judge**   **Frontend Engineer & User Experience Lead**
- Blaze Online Judge allows programmers to practice their competitive programming skills by competing in real-time programming contests and solving practice problems. Created for the UTA CS department.
- Developed the front end using React, significantly minimized load times by leveraging a content delivery network and effective centralized state management
- Seamlessly consumed an asynchronous code execution micro-service and provided a consistent code submission interface
- Executed secure management of JWT to facilitate user authentication

APR. 2019   **Edunate**   **Backend Engineer & Deployment Lead**
- Edunate is a platform that helps students to succeed in college through micro-donations, peer tutoring, and textbook exchange
- Developed REST API with Node.js, Express, Google Cloud Firestore, and Stripe on an AWS Lightsail server

FEB. 2019   **MemeRoyale**   **Backend Engineer & API Lead**
- MemeRoyale is a friendly-competition based game (Android and iOS) that allows you to compete with others to see who can create the best meme
- Developed REST API with Node.js, Socket.IO, Express, and MongoDB on an AWS Lightsail server