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February 4, 2020

Dear Recruiting Professionals & Hiring Managers:

I'm a graduate of the Georgia Institute of Technology (Class of Fall 2019), with a Bachelor of Science in Computer Science and minors in Biomedical Engineering & Industrial Design.

Highlights of my attached resume include:

- ***My objective: To find a full-time position as a software engineer.***
- Link to my GitHub repositories, with code written in:
  - C#,
  - TypeScript
  - Python,
  - Java,
  - Assembly,
  - C,
  - SQL & NoSQL for backend, with REST API implementations for apps.
  - Angular (TypeScript) and Spring Boot (Java) frameworks for rapid prototyping of full stack applications.
- Link to my portfolio of sample works.
- B.S. in Computer Science from the Georgia Institute of Technology [completed December 2019] Graduating GPA: 3.26
- B.S. in Engineering Psychology from Florida Atlantic University [completed 2002] Graduating GPA: 3.49. Degree's curriculum emphasized organizational behavior and human factors in the workplace.
- Interdisciplinary tool set.
- Knowledge gained while earning this degree was basis for sustained success in managing human capital, budgeting of resources, & project management as a Senior Relationship Manager with RBC Bank.
- 5 years with RBC Bank:
  - Customer-facing sales & marketing strategies pitched to bank executives.
  - Project & Personnel Management.
  - Account Sales, Software Integration, & Interdepartmental Collaboration.
  - Consistently delivered results in the top 1% of the company's relationship managers.
  - Software design & development experience.
  - Focus on UX research as requirement for creating successful software applications.

I appreciate the time you've given to review this letter, with my resume attached below. Should you have any questions, please contact me at your convenience using the contact information at the top of this letter.

Sincerely,

Eric Malavenda

Eric R. Malavenda

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LinkedIn: https://linkedin.com/in/ericmalavenda
Portfolio: https://eric-malavenda.myportfolio.com
GitHub: https://github.com/ericmalavenda

[EDUCATION]

Georgia Institute of Technology

Computer Science, Bachelor of Science [completed Fall 2019]
Overall GPA: 3.26, Major GPA: 3.38
Minor: Biomedical Engineering
Minor: Industrial Design

Florida Atlantic University

Engineering Psychology, Bachelor of Science [completed 2002]
Overall GPA: 3.49

[EXPERIENCE]

(Note: As a student at Georgia Tech, I worked for State Farm, Comcast, and Microcenter, in non-software engineering/ non-software development roles.)

RBC Bank USA
Boynton Beach, FL
Senior Relationship Manager
April 2006 – December 2011

- Application design & development with .NET (C#, SQL Server, JavaScript).
- Software integration & deployments requiring interdepartmental collaboration.
- Led project focused on integration of UX research with existing software development practices.
- Project, sales, & personnel management.
- Customer-facing sales & marketing strategies.
- Consistently delivered results in the top 1% of RBC Bank's relationship managers.
- Team coordination & resource management.

[TECHNICAL SKILLS]

[Language/Framework]: Java/Spring Boot, C#/.NET, Typescript/JavaScript/Angular, Python/Django
[Low(er)-Level Languages]: Assembly, C, (C++)
[SQL]: MySQL, PostgreSQL, SQL Server
[NoSQL]: Firebase, Mongo
[Computer Graphics]: OpenGL/C, WebGL/TypeScript/JavaScript
[Mobile-Platform]: Android
[Cloud-Platform]: GCP
[SDLC]: Agile/Scrum *[SDLC Tools]:* Visual Paradigm

[PROJECTS]

- **Senior Capstone Project / Full-Stack Web Application (Capstone Team sponsor: Honeywell) (GitHub Link [Front-End using Angular with Typescript]) + (GitHub Link [Back-End using Spring Boot with Java & Postgres])**

- Goal was to improve delivery of digital NOTAMs to pilots (Notices to Airmen)
- Data-parsing algorithms selected according to data-type being scraped and parsed.
- Parsed data was JSON string-tokenized prior to indexing in all cases, for optimization of REST API and elapsed time from query to start of front-end rendering (front-end calls to API written in TypeScript).
- Query time to time of rendering visualized data improved by > 75% in all of our final set of unit tests, compared to previous iterations of our application.
- Java Back-End created with Spring Boot Framework & PostgreSQL.
- Front-End written in Typescript, with Angular used as framework.
- CQRS architecture included in design of future iterations of our app, for optimization of command execution/query responsiveness of our application.
- Future app iteration's CQRS design includes No-SQL database, for improved handling of datasets (quick storage of data in No-SQL DB when SQL DB load threshold reached) & implementation of circular-queue algorithm for enqueuing of parsed data and dequeuing of data during SQL DB indexing.

- **Sonification Interface Design: (GitHub Link)**
  - Lie Detector UI & sound design using C#, Unity, Adobe Audition.
  - Eight-Track Player UI design using C# and Unity.

- **Computer Vision & Image Manipulation: (GitHub Link)**
  - Visualizations of Gaussian and Laplacian Pyramids for image blending using Python with NumPy & SciPy.
  - Single image rendering of multiple images containing multiple subjects with Open CV + Python.
  - Feature Matching with SIFT in OpenCV + Python.
  - Haar feature-based cascade classifiers used for face detection to create an intra-image face swapping application.
  - Refactoring of OpenCV API C++ code & associated Python bindings and header parser scripts, if customization improved rendering.

- **Relational Database Design for Library Web Application: (GitHub Link)**
  - RDB-schema design, with initial visualization of database created in the format of an entity-relationship diagram.
  - Web app simulated the GT library server and UI.
  - Our app's back-end consisted of a Node.js web server, and a MySQL DB accessed using the SSH PuTTY client.
  - The Bootstrap front-end framework was selected for rapid prototyping of our application's UI.

- **Android Mobile Application Design & Development: (GitHub Link)**
  - Developed rat-population tracking mobile app, to assist NYC with tracking rat sightings within the city.
  - Android Studio IDE used to build mobile app written in Java, with Firebase DB.
  - Test-driven development of our application with JUnit.
  - GitHub for version control & ZenHub plug-in for team management.
  - SDLC designs modeled using Visual Paradigm.

- **Java Full-Stack Application with JavaFX / Spring Boot / MySQL:**
  - Coded a desktop game app consisting of approximately 30 classes.
  - MVC software architecture pattern used to yield scalable, maintainable code base.
  - MySQL DB with REST API written in Java, using Spring Boot as framework.
  - JavaFX used to build front-end.

[LANGUAGES]

English, Spanish