

## LANGUAGES AND TECHNOLOGIES

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- Java, Python, JavaScript, TypeScript, SQL, Dart
- MySQL, sqLite, MongoDB, Firebase, Flutter, Git, Android, Docker, Google Cloud Platform, React, Django

## EMPLOYMENT

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<b>Software Engineer Research Assistant</b>	<b>Boston University</b>	<b>Dec 2020 – Present</b>
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- Core developer of open source project, Ubiqlog2<sup>1</sup> (DOI), upgrading Gradle dependencies, configuring external libraries, and adapting the legacy code base to operate on 98.2% of Android devices
- Redesign entire user interface by making modifications to 8 XML files, improving the visual structure with Material design practices, and simplifying the user experience to 4 screens
- Implement a conversational agent (chat bot) capable of querying sqLite, MySQL, MongoDB, and Firebase databases, allowing users to effectively retrieve requested data and display it as a natural language response
- Made technical edits on more than 100 pages of current professor's data science textbook by providing examples to explain data mining concepts within certain chapters and correcting grammatical errors
- Perform academic tutoring for 22 students, teaching advanced programming techniques and concepts, improving students problem solving skill set

<b>Software Engineer Intern</b>	<b>Software App &amp; Innovation Lab</b>	<b>May 2019 – Sep 2019</b>
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- Revamped ASL-LEX, a database of lexical and phonological attributes of nearly 1800 signs in American Sign Language
- Built a data visualization tool with JavaScript and D3 that displays a graph network representing hand signs in American Sign Language to help researchers identify relationships among different signs
- Created a data pipeline to process more than 4GB of Sign Language information, automating researchers workflow
- Executed a shell script that deployed 3 python scripts on a Linux server in order to generate more than 1800 hand sign data in preparation for the graph visualization

## EDUCATION

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<b>Boston University</b>	<b>Boston, MA</b>	<b>Aug 2018 – May 2020</b>
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- **M.S. in Software Development, GPA: 3.77**
- **Graduate Coursework:** Algorithms and Data Structures, Analysis of Systems and Design, Agile Software Development, Advanced Programming Techniques, Software Design Patterns, Web Development, Machine Learning

<b>Quinnipiac University</b>	<b>Hamden, CT</b>	<b>Aug 2013 – May 2017</b>
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- **B.S.E. in Computer Science**
- **Undergraduate Coursework:** Programming and Problem Solving, Data Structures and Abstractions, Object Oriented Design and Programming, Computer Architecture and Organization, Algorithm Design and Analysis, Introduction to Software Development

## PROJECTS

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- **Electronic Toll System:** Simulation of different types of vehicles traveling through electronic tolls where users will receive a monthly bill for the total distance vehicles travelled. Java, Maven, MongoDB, Docker
- **G4 Design Patterns:** Repository of the most common software design patterns with more than 11 code examples and extensive documentation describing each pattern. Java
- **Flow Bot:** Natural language processing chat bot trained on a sequence to sequence model, able to maintain a human like conversation with the user. Python, TensorFlow
- **Social Share (Instagram Clone):** Social media application utilizing mobile sensors to capture photos and share user locations. Dart, Flutter, Firebase

## ADDITIONAL EXPERIENCE AND AWARDS

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- **2019 Citizens Bank Challenge:** Shared Challenge 1st place winner, out of 24 teams
- **2017 Quinnipiac Hackathon:** 2nd place winner, out of 13 teams

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<sup>1</sup><https://gitlab.com/rezar/Ubiqlog2>