

Nicholas Alvarez

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Education

Rice University

Houston, TX, USA

BSCS IN COMPUTER SCIENCE; BA IN LINGUISTICS

August 2015-May 2019

Relevant Coursework: Intro To Database Systems, Web Development, Fundamentals of Parallel Programming, Advanced Object-Oriented Programming and Design, Operating Systems and Concurrent Programming, Introduction to Computer Security, Introduction to Program Design, Introduction to Distributed Computer Systems, Distributed Program Construction, Compiler Construction, Honors Linear Algebra

GPA: 3.57

Skills

Programming: Python, Java, Junit, C, SQL, JavaScript, Angular, Linux/Unix, Git, Subversion, MongoDB, PowerShell

Languages: English, Spanish, Japanese

Experience

General Motors

SOFTWARE DEVELOPER - GLOBAL FINANCE IT

2019 - Present

- Interface directly with business users to migrate local workflows onto a KNIME server.
- Head innovation team in installation and configuration of company's KNIME Server instance, including custom development of utility code and enabling compatibility with services such as Active Directory.
- Migrate data governance operations from Collibra to IBM Watson Knowledge Catalog and Oracle DRM.
- Develop and maintain Python, PowerShell, and Bash scripts to interface with administrative functions and data of Oracle Hyperion suite products, Watson Knowledge Catalog, KNIME Server, and other applications.
- Develop and maintain Python, JavaScript, and SQL scripts to extract, transform, and load data between relational databases, Essbase OLAP, business intelligence, and other applications.
- Work closely with internal business users in remote offices, using an agile development (scrum) strategy.
- Oversaw and streamlined team's monthly development migration process, saving four to six hours per month.
- Created and enhanced reports for auditing details of the company's implementations of various commercial off the shelf software products.

Rice University

INTRO TO COMPUTER SYSTEMS TEACHING ASSISTANT

Spring 2018, Spring 2019

- Explained to students fundamental principals of computer systems such as virtual memory and usage of C and Unix.

Projects

Dateline Rice 2.0

DATA COLLECTION TEAM; ARCHITECTURE/INFRASTRUCTURE COMMITTEE

2018

- Negotiated, designed, implemented, and debugged a REST API for management of a web-scraping service for automatically gathering all Rice University related news over a given time interval.
- Coordinated with three other teams to architect a distributed and extensible service.
- Responded quickly and effectively to bugs and critical errors discovered by both the end user and other teams during development.
- Built a fully fledged HTTP server and daemon process in Python to handle concurrent requests made to and actions performed by the service.
- Engaged in an agile-style development workflow to automate manual tasks for a client within a four month time frame.

Group Chat Application and API

2017

- Designed an API for peer to peer group messaging applications using a message-passing architecture allowing two or more separately-developed chat applications to receive and process messages of arbitrary types from each other using an extended visitor model.
- Provided support to seventy users of the API each creating their own chat application.
- Determined and examined use cases and catered the API for orthogonality and maximal usability.
- Implemented and debugged the API in Java.
- Developed a Java chat application using the API able to send images and receive and process messages of arbitrary types, sending and displaying them using a Java Swing user interface.