Julian Rachele

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EDUCATION

University of South Carolina Columbia, SC
BS Computer Science *GPA: 3.91* Aug 16 - May 20

SKILLS

Proficient *C/C++, Python, Dart/Flutter*
I have many years of educational experience in these languages and/or have leveraged these skills in either a professional or research setting for several projects.

Competent *Haskell, Java, HTML/Javascript, SQL*
I have used these languages for hobby projects, and I am confident with them.

French *C1*
I have been studying French for 7 years and I use it regularly. It is a passion of mine and I have full professional fluency.

EXPERIENCE

Astérion VR Rennes, France
Software Engineering Intern Jun 19 | Jul 19

- Implemented the Goal Oriented Action Programming (GOAP) AI model to direct terrorist and hostage AI for French counterterrorist operatives during virtual training sessions.
- Wrote the GOAP implementation as a C++ plugin for the Unreal Engine.
- Wrote tests and integrated the plugin using Unreal's blueprint system.

Department of Engineering and Computing Columbia, SC
Research Assistant under Dr. Homayoun Valafar Nov 18 | Present

- Optimized legacy codebase to C++11 and developed GUI in Qt5.
- Wrote scripts to harness individual elements of the protein-folding engine.
- Updated documentation and organized project structure.

Department of Mathematics Columbia, SC
Research Assistant under Dr. Paula Vasquez May 18 | Nov 18

- Created data visualization platform in Python using Pandas and Plotly.
- Planned and built custom Linux machine for data processing.

Donate Life South Carolina Greenville, SC
Volunteer Aug 10 | Present

- Designed posters, flyers, and banners promoting organ and tissue donation.

PROJECTS

CurriculumX *Python, Django* CurriculumX.org
I am the project lead for a South Carolina statewide project distributing pedagogical resources to instructors throughout the state.

Protobowl Mobile *Dart, Flutter*
A mobile application that uses web sockets to create a real-time multiplayer trivia application. The mobile app interfaces with the publicly exposed web sockets at Protobowl.com and uses Redux for state management.

Saisi *Haskell*
A simple interpreter from-scratch with custom parser combinators and function support.

AWARDS & ACCOLADES

Best Project Apr 2019
Recognized by both students and faculty of the French department for my project Zone Rouge, which documents France's sacrificed villages in WWI.

French Club President Nov 2016 | Present
Served as French Club Vice President for a year and President for 3 years.