

JESSE BARTOLA

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EDUCATION

Computer Science, Mathematics (B.S.)

University of Massachusetts Amherst

3.91 GPA

May 2019

Notable Coursework

Artificial Intelligence, Algorithms, Mobile Health Sensing and Analytics,
Operating Systems, Digital Forensics, Software Engineering

TECHNICAL SKILLS

Proficient: Java, Scala, Python, Javascript, SQL, HTML, CSS

Experience: iOS (Swift), C, MongoDB, LaTeX

JOB EXPERIENCE

Scala Web Developer University of Massachusetts 9/17 - Present

- Augmented the existing application website for MS and PhD Computer Science admissions
- Utilized Scala's concurrency model to
- Optimized system architecture by refactoring relational database design patterns

Teaching Assistant University of Massachusetts 9/16 - Present

- Oversaw the curriculum and administration for the Programming Methodology course
- Collaborated with course instructors in teaching concepts derived from the functional programming paradigm using Scala
- Responsible for orchestrating class discussion sections and holding weekly office hours

Software Engineer Intern Charles River Analytics, Inc. 5/17 - 8/17

- Aided in the full-stack development of a React.js web application designed to detect system hardware failures onboard ships in the Navy
- Formulated Bayesian Network models for hardware fault detection using the Figaro probabilistic programming package for Scala
- Integrated a sandbox environment for testing of observation patterns against classification algorithms to ensure accurate and optimal performance

Lead Platform Engineer TxtAdvice LLC 6/15 - 11/15

- Participated in full-stack development of a web application providing users with realtime fashion advice from professionally trained stylists
- Synthesized and maintained an SMS/MMS interface using React.js, Twilio's API, and Python's Flask web framework. Configured PostgreSQL queries to collect and analyze user usage data

INDEPENDENT PROJECTS

Medicus 10/16

- Led a team of students in engineering an iOS application employing machine learning and image recognition to diagnosis skin conditions within a predetermined confidence interval
- Developed unique probabilistic models through the use of Clarifai's image recognition API to accommodate the identification of common skin ailments

HONORS/AWARDS

3rd Place 2015 Hack UMASS

Worked with a team of students in assembling an iOS application through rapid prototyping, utilizing Arduino sensors to monitor multiple sclerosis symptoms in patients

2nd Place Computer Programming, 2015 NJ SkillsUSA State Championships

Competed against 200+ programmers from New Jersey in Java applet development