

Madhavan R.P

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Education

Iowa State University

MASTER OF SCIENCE - COMPUTER SCIENCE
GPA 3.81/4.00

Ames, Iowa

July 2018 (expected)

M.N.M Jain Engineering College

BACHELOR OF ENGINEERING - COMPUTER SCIENCE AND ENGINEERING

Chennai, India

May 2011

Skills

Languages/Tools Java, Python, C++, C, Git, Javascript

IDE Eclipse, XCode, IntelliJ

Experience

NP Compete Technologies

Chennai, India

TECHNICAL STAFF

Oct. 2011-Sept. 2014

- Developed an Android SDK that enabled businesses to detect user actions and make dynamic UI changes to their existing mobile applications in real-time.
- Designed and implemented a comprehensive testing strategy by writing module-level JUnit tests and defining product-level use case scenarios.
- Defined and created a novel Contact Management application that enabled users to easily access and manage their contacts across various social networks and platforms.
- Implemented a Flask web application to collect user's contact information via OAuth and store it in user's Dropbox.
- Technical lead of a team of 4 programmers, managing product features, software design choices, coding standards and continuous integration.
- Implemented a tool in python that processed and categorized emails using the Naive Bayes Classifier.
- Initiated a team-wide peer code review practice that contributed to accelerated development.
- Utilized experience in iOS and the Android platform to solve project-specific problems for various development teams.

Academic Experience

Iowa State University

Ames, Iowa

RESEARCH ASSISTANT

July. 2017-present

- Researching and creating efficient probabilistic algorithms to spread information on large graphs.
- Created an algorithm that improved the information spread by 12% while running almost 100 times faster than the existing solution.
- Programmed the algorithms in C++ to achieve high practical performance on graphs with millions of edges.
- Efficiently used data structures to store the graphs allowing for blazing fast implementations of graph traversal algorithms.

Iowa State University

Ames, Iowa

TEACHING ASSISTANT

Aug. 2016-July 2017

- Taught recitation sessions for an introductory course on Java consisting of 50 students.
- Assisted the instructor in designing homeworks and class projects.
- Taught laboratory sessions for introductory course in Microsoft Excel and Access.

Extracurricular Activity

Computer Science Graduate Student Organization

Ames, Iowa

SENATOR AND COMMITTEE MEMBER

Aug. 2017 - present

- Organized a Research Networking Event that enabled new graduate students to connect with research groups/labs.
- Represented the Computer Science Department as a senator in the Graduate and Professional Student Senate.