Vikram Sreekanti

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EDUCATION

Ph.D. Candidate, Computer Science University of California, Berkeley Advisor: Professor Joe Hellerstein August 2016 - Present

Bachelor of Science, Electrical Engineering & Computer Science May 2015 University of California, Berkeley

RESEARCH EXPERIENCE

Graduate Student Reseacher RISELab, U.C. Berkeley

August 2016 - Present

- Continuing work on the open-source Ground project.
- Exploring research avenues in systems infrastructure required to support largescale data context services.
- Researching data context's role in various machine learning systems applications.
- Leading a group of industry collaborators & undergraduates to faciliate the system development effort.

Software Engineer; Researcher AMPLab, U.C. Berkeley

June 2015 - August 2016

- Working under Professor Joe Hellerstein on a data context services project called Ground.
- Built a system from scratch that stores metadata about datasets, analytics workflows, and data lineage.
- Designed and implemented a core data model and REST API in Java.
- Independently drove the architecture and vision of the system based on feedback from interested users.
- Explored various research avenues motivated by building this system.

Research Assistant

August 2014 - May 2015

AMPLab, U.C. Berkeley

- Worked with Professor Mike Franklin on the Velox project, which efficiently serves trained machine learning models.
- Designed a uniform storage API and implemented various storage backends.
- Implemented a top-k functionality that recommends the k most preferred items for a particular user.
- Integrated with the Vowpal Wabbit's counterfactual exploration tools.

INDUSTRY EXPERIENCE

Software Engineering Intern Cloudera

May 2014 - August 2014

- Summer intern on the Cloudera Manager team.
- Developed an interactive shell for Cloudera Manager, enabling command-line interaction using a RESTful API.

• Written in Java, the shell automatically detects and creates commands for all REST endpoints in the API using Java's Reflection library. As the API evolves, no new code will need to be written to update the shell.

SDE Intern

June 2013 - August 2013

Fall 2016

Microsoft (Yammer)

- Summer intern on the Core Services team.
- Developed a load- and performance-testing framework for internal, backend, HTTP-based services.
- Developed in Java, the framework is highly configurable and allows for both production traffic replay as well as custom traffic generation.
- Also provides data collection, analysis, and visualization.

PUBLICATIONS Ground: A Data Context Service. J.M. Hellerstein, V. Sreekanti, J.E. Gonzalez, et. al. CIDR 2017.

TEACHING

Teaching Assistant, CS 186 (Undergraduate Database Systems)
U.C. Berkelev

- Head TA under visiting faculty, Karthik Ramasamy and Amit Shukla.
- Led a group of 7 undergraduate TAs.
- Re-designed course projects to have students build internal components of a traditional relational DBMS.
- Wrote exams, managed TA development of homework, and handled class logistics.

Teaching Assistant, CS 186 (Undergraduate Database Systems) Spring 2015 U.C. Berkelev

- Head TA under Professor Joe Hellerstein.
- Received the Berkeley Outstanding GSI Award for my work this semester.
- Student feedback rating: 4.6 out of 5.
- Taught two discussion sections and held two office hours every week.
- Developed two new assignments that added features to the SparkSQL query execution engine. The first assignment had students implement result caching for UDFs. The second was focused on implementing an asymmetric hash join algorithm.
- Helped write and grade exams.

Teaching Assistant, CS 186 (Undergraduate Database Systems)

Spring 2014

- TA under visiting Professor Dan Olteanu.
- Student feedback rating: 4.2 out of 5.
- Taught one discussion section and held two office hours per week.
- Devleoped two homework assignments. The first exercised students' abilities
 to write efficient SQL queries. The second was focused on concepts in data
 normalization and recovery algorithms.
- Helped write and grade exams.

AWARDS & HONORS

2015-2016 Outstanding GSI Award

EXTRA-CURRICULAR ACTIVITIES

President

Eta Kappa Nu, Mu Chapter

- In charge of officer corps of 35.
- Organized and led weekly meetings in order to ensure the organization was functioning properly.
- \bullet Organized banquet to commemorate the hundredth anniversary of the Mu Chapter.

Member & Officer

Fall 2013 - present

Fall 2015

Eta Kappa Nu, Mu Chapter

- \bullet Organized infosessions for various companies.
- \bullet Coordinated all course evaluations for all courses in the EECS department.
- Managed the organization's finances.