MATTHEW SCOTT LEVAN

Rancho Palos Verdes, CA

(707) · 321 · 6426 ◇ matt.s.levan@gmail.com ◇ github.com/mattlevan

PERSONAL STATEMENT

Marc Andreessen said, "Software is eating the world," and he's right. As a Master's student and young software engineer, I spend every day learning and working to be the driving force that ensures the software that *does* eat the world is the best it can be. My professional interests include: machine learning, artificial intelligence, cloud computing, DevOps, distributed systems, project management, software architecture design, and software engineering.

EDUCATION

California State University, Dominguez Hills   2014–December 2017
M.S. in Computer Science
GPA: 3.797

SKILLS

Languages   Java, Scala, Python, C
Operating Systems GNU/Linux, Mac OS X, iOS, Windows XP–10
Tools   Git, GCC, Xcode, Docker, NoSQL, MySQL, NumPy, Pandas, GCP

EXPERIENCE

California State University, Dominguez Hills   2016–Present
Researcher   *Computer Science*

· Continued academic research in the fields of algorithms, big data, and cloud computing. Author on two IEEE published papers. See the Publications section for details.

                                                                             2016–Present
Java/OO Programming Lab Instructor   *Computer Science*

· Lead interactive, hands-on Java programming labs to assist students with implementing theoretical Object-Oriented design concepts in small-scale applications and simulations.

Alcoa Fastening Systems & Rings   October 2015–April 2016
Automation Engineering Intern   *alcoa.com*

· Implemented standardized systems and products, configured networks, and wrote custom machine programs to facilitate automation of a wide variety of manufacturing processes based on exhaustive data collection and analysis.

                                                          June 2015–September 2015
Computer Science Intern   *alcoa.com*

· Designed and implemented a queue and batch system with a custom web interface for a high performance computing cluster using Linux, SLURM, PHP, Python, HTML, and Bash. System balances workload efficiently, queues fairly, and is accessible remotely.

PUBLICATIONS

Exploiting Topological Structures for Graph Compression Based on Quadtrees   Oct. 2016
Co-author with Dr. Amlan Chatterjee, et al.   *Computer Science*

· Developed novel algorithms that utilize the quadtree data structure for compressing adjacency matrices, particularly those used for representing social network graphs. Corresponding querying techniques allow reading directly from compressed matrices. Our paper, *Exploiting Topological Structures for Graph Compression Based on Quadtrees* will be published in 2016 IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN).

Job Scheduling in Cloud Datacenters Using Enhanced Particle Swarm Optimization   Dec. 2016
Co-author with Dr. Amlan Chatterjee, et al.   *Computer Science*

· Performed exhaustive analysis on the efficiency of the particle swarm optimization (PSO) algorithm (a probabilistic metaheuristic algorithm) for scheduling jobs on cloud data centers. The paper, entitled *Job Scheduling in Cloud Datacenters Using Enhanced Particle Swarm Optimization* has been accepted and will be published in the 2017 IEEE International Conference on Convergence of Technology (I2CT) academic journal.

COURSEWORK

Computer Science   2014–Present
GPA: 3.797

Computer Organization	A	Artificial Intelligence	A
Data Structures	A	Big Data	A
Research Methods	A-	Discrete Mathematics	A-
Programming Languages	A	Analysis of Algorithms	A-
C Programming & Unix	A	Software Project Management	A
Java I & II	A	Functional Programming in Scala (Coursera)	A
Human Computer Interaction	A	Object-Oriented Analysis & Design	-
Calculus I, II, & III	A	Advanced Programming Langs	-
Operating Systems	A-	Advanced Operating Systems	-