Education

University of Colorado Boulder

Boulder, CO

M.S., Computer Science (GPA 3.97)

August 2017 - August 2019

- Courses: Analysis and Design of Algorithms, User Centered Design, Database Systems, Big Data Architecture, Machine Learning, Computational Genomics, Natural Language Processing.

Universitat Politècnica de Catalunya

Barcelona, Spain

B.S., Computer Science (8.8/10)

September 2013 - July 2017

- Courses: Data Mining, Data Compression, Programming Languages, Software architecture, Databases, Parallelism, Project Management, Web architecture, Android, NoSQL databases, Reflective programming.

Experience

• Project EPIC, University of Colorado Boulder

Research Assistant, February 2017 - August 2019

- Analyzed 2000 tweets/minute of real time data by building Big Data pipeline using Spark, Kafka and Cassandra.
- Deployed system prototype with Kubernetes using custom microservices written in Go and Python.
- Twitter Software Engineering intern, May 2018 - August 2018
 - Developed CLI to deploy Apache Airflow instances internally. (Python)
- Helped reduce ML model training and deploy time by 1/4 developing ML Workflows. (Python)
- inLab FIB Web Development Intern, March 2015 - January 2017
 - Built REST API for faculty data Average usage of 25.000 daily accesses. (Django, Python)
 - Reduced Oracle SQL query response time by 1/3 using non-blocking updates and materialized views.
- con terra GmbH Intern. Summer 2015
 - Developed bike share routing app using OpenStreetMap open data and Citibikes API. (Javascript)

Projects

• gTweetMap, a tool for the Geolocation of social Movements

Spring 2013

- Built geolocated tweets tracker app to study social movements.

Leadership

• HackCU, University of Colorado Boulder

Tech director, February 2017 - April 2019

- Co-directed Colorado's biggest student hackathon with 600 attendees and a 15 people core team.

• HackUPC, Universitat Politècnica de Catalunya

Co-Director, November 2015 - September 2018

- Co-directed Spain's biggest student hackathon with 500 attendees and a 20 people core team.

Awards

- Denver Government award winner at ETHDenver. (2018)
- Grant winner at MD5 Physical Cyber Hackathon. (2018)
- Balsells Fellowship. (2017-2019, two years of funding for graduate studies)
- Balsells Mobility program. (2017, five months of funding for research)
- Nine distinction awards during B.S. (2013-2017, awarded to 5% top students per class)

Publications

- Jennings A., Gerard C., Kenneth M. A., Leysia P., and Rebecca M. Incorporating Context and Location Into Social Media Analysis: A Scalable, Cloud-Based Approach for More Powerful Data Science. HICSS 52 (accepted).
- Gerard C. Social Media Analysis for Crisis Informatics in the Cloud MS Thesis

Skills

- Programming: Java, Python Experience with: Go, C++, Ruby, Ruby on Rails, Javascript, Android, Django, Flask, SQL, HTML, CSS, Git, Scrum, Haskell, Smalltalk, Spark, Kafka, Kubernetes, Scala.
- Native: Catalan, Spanish. Advanced: English.
- Hackathon participation: OxfordHack, BrumHack 4.0, MHacks 9, HackJunction, T9Hacks, ETHDenver.