Keenen Cates

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RELATED EXPERIENCE

National Security Agency May – August 2017
Data Science Intern

- Explored large datasets using visualizations and statistical models; used findings to support the creation of analytics.
- Developed analytic to accelerate the processing of collected data on NSA's cloud computing platform. Incorporated the analytic into a NSA tool designed for strategic and tactical planning.

Clearance Top Secret/SCI clearance with Full Scope Polygraph

References Available Upon Request

PROJECTS

Dots A.I. (2 person) March 2017

- Modeled an artificial dots player in Racket to generate optimal moves for a given board state using Alpha-Beta Pruning.
- Expanded knowledge of graph and search algorithms by experimenting with different methods of generating optimal moves

Deterministic Select (1 person) March 2017

- Implemented the Median of Medians algorithm in C++ which selects the k^{th} order statistic of a given collection of data in O(n) time.
- Optimized code for scalability with large input.

Drivers (6 person) August – November 2016

- Developed software in C# for a local non-profit organization as a project for software engineering class. The software organized volunteer transportation by dividing the attending children among varying available transportation in such a way that reduced route overlap.
- Experimented with multiple clustering algorithms with use of the strategy pattern.
- Used Google Maps API for geolocation and routing.
- Project sponsor estimated that the software delivered on ~90% of the customer's requests.

Open Source Contributions

Pybee/**Batavia**
Github

- Contributed to the Batavia project by editing the new user page for clarity and fixed a bug in the installation script.

Programming Competitions ICPC Mid-Central 2016 contest – Team Evansville A

CURRENT EDUCATION

UNIVERSITY OF EVANSVILLE **GPA 3.18**
Double Major B.S. Computer Science and Mathematics Expected May 2018

UDACITY
Machine Learning Nanodegree Expected Jan 2018

Computer Skills Python R C/C++ Git Unix

Coursework

Statistics/Probability	Algorithms
Elementary Analysis	Abstract Algebra
Software Engineering	Operating Systems
Artificial Intelligence	Formal Languages