Cody Kinneer

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Education

Institute for Software Research, Carnegie Mellon University — **Pittsburgh, PA**
PhD Software Engineering, Advisors: Claire Le Goues, David Garlan — *In Progress*

Allegheny College — **Meadville, PA**
Bachelor of Science in Computer Science, 3.798/4.000 — *2016*
Minor: Political Science

Undergraduate Thesis

Title: *Query-aware Search-based Schema Testing*

Supervisors: Dr. Gregory M. Kapfhammer, Dr. Robert Roos

Description: Generating test data for relational database queries increases the realism of testing and is a step towards comprehensive testing of database dependent applications.

Publications

Cody Kinneer, Gregory M. Kapfhammer, Chris J. Wright, and Phil McMinn. Automatically evaluating the efficiency of search-based test data generation for relational database schemas. In *Proc. of 27th SEKE*, 2015.

Cody Kinneer, Gregory M. Kapfhammer, Chris J. Wright, and Phil McMinn. Expose: Inferring worst-case time complexity by automatic empirical study. In *Proc. of 27th SEKE*, 2015.

Phil McMinn, Chris J. Wright, Cody Kinneer, Colton J. McCurdy, Michael Camara, and Gregory M. Kapfhammer. *SchemaAnalyst*: Search-based test data generation for relational database schemas. In *Proc. of 32nd ICSME*, 2016.

Experience

Research

Allegheny College — **Meadville, PA**
Cupper Scholar — *Summer 2015*
Database testing, search-based test data generation, and performance evaluation
- Developed technique for automated empirical analysis of test data generation tools.
- Conducted a large-scale experiment using a high performance computer cluster.
- Presented results at an international conference and gave a technical demonstration during poster session.

University of Colorado Colorado Springs — **Colorado Springs, CO**
NSF REU, Dr. Kristen Walcott-Justice — *Summer 2014*
Mobile application testing and machine learning
- Studied behavior of Android applications and test suites using aspect-oriented programming.
- Evaluated test suite adequacy by probabilistic comparison to user interactions.
- Communicated research by writing reports and delivering presentations.

Teaching

ILead PA, Professional Conference **Harrisburg, PA**
Instructor *June 2015,2016*
Taught an interactive two hour class on embedded systems programming projects for libraries.

Allegheny College **Meadville, PA**
Computer Science Tutor *Fall 2014–Spring 2016*
Reinforce lab assignment content to computer science students during weekly drop-in hours.

Allegheny College **Meadville, PA**
Freshman Seminar Teaching Assistant, Dr. Howard Tamashiro *Spring 2014*
Assisted transfer students with writing skills and adapting to life at Allegheny College.

Vocational

Meadville Public Library **Meadville, PA**
Information Technology Department *2012–2016*
Design and implement software, analyze data, automate reports
- Integrated Adobe Content Server with library's online catalogue for a statewide ebook hosting project.
  - `http://catalog.paliberty.net/`
- Developed computer-vision gate counters for reporting library visitors.
- Analyzed public Wi-Fi usage of nine public libraries in Crawford County.

Skills

Languages: Experienced: Java, LaTeX, R **Working knowledge**: Python, C, Perl

Software: Git, Eclipse, Vim, Linux, Windows

Awards

Best Senior Thesis Prize: Departmental award for writing the best undergraduate thesis.

Outstanding Senior Major: Prize for achievement and contribution to the life of the department.

Certificate of Appreciation: From the PA Department of Education for contributing to ILead.

Alden Scholar: (Dean's List) Fall 2012–Spring 2016.

Outstanding Junior Major: Prize for the computer science junior major with the highest GPA.

Software

ExpOse: Automatically conduct empirical performance evaluations.

- `https://github.com/kinneerc/ExpOse`

cv-counter: Track the number of visitors moving through a doorway using computer vision.

- `https://github.com/kinneerc/cv-counter`

giv-planner: Uses Google APIs to plan college operated shuttle van routes.

- `https://github.com/kinneerc/giv-planner`

Contact

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Twitter: @cbkinneer **LinkedIn**: `linkedin.com/in/kinneerc`