

undergraduate of computer science and mathematics

#### about

Tulsa, OK 918-978-0601

ian.riley.915@gmail.com github/ttowncompiled

## programming

TypeScript, JavaScript, Dart, Python, Go, Java

#### contributions

Angular DefinitelyTyped Rx TypeScript

#### interests

software development, application framework development, software architecture && design patterns, language design, machine learning, bioinformatics && neuroinformatics research

#### education

'12-'16 **University of Tulsa** 

gpa: 3.52

senior of computer science and mathematics

# experience

'15 Google MTV

SWE intern on Angular

Designed and implemented the TacticalJS data persistence library for Angular. Tactical was my first attempt at creating the MVP for a new project using formal design patterns and techniques.

'14 Google CAM

EP intern on Pinpoint

Implemented an internal UI to improve the workflow for creating pipelines of structured data for search. This was my first opportunity to think critically about end user experience and test driven design

#### research

'16 Red academic research

Evaluation of Red, a bioinformatics tool for detecting repeats denovo in nucleotide sequences.

'13-'14 **RFID Research Grant** 

academic research

Developed protocols to concisely and securely store standard adult vaccination information on 2000 bit RFID tags.

'13 Tulsa Undergraduate Research Challenge

academic research

Worked with a small team to design a dynamic risk access control system. This system extended the spatial access control model by employing PGMs such as Bayesian networks and Markov chains for decision making.

### courses taught

'16 Software Development and Industrial Practices

cs 3862

I headed a small team of young students through the process of designing and implementing, using industrial techniques and design patterns, an in-browser module loader for JavaScript applications, and an online social media application

'15 Software Tools and Practices

cs 3861

I instructed a small group of young students on proper Agile development, Test driven design, and the use of Version Control systems as they each implemented their own code linter.

# organizations

| '14-'15 | Linux Users Group  Conducted several meetings and headed a few projects over the course of the year which included research ventures into topics such as code reusability, workstation efficacy, net neutrality, and even bitcoins.  |
|---------|--|
| '13-'15 | <b>Tulsa Web Devs</b> Contributed to numerous local and national civic hacking events targeting areas such as local city organization, public health, and food equality.   |
| '13-'15 | Association of Computing Machinery  Facilitated over two dozen lunch and learns, covering various topics, each year.  I have also helped organize several collegiate and civic hackathons as well as have spearheaded a few extended hackathons focused on building code confidence in freshmen programmers. |