# Kyle Headley

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First Year PHD Student

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**Objective**

Looking for a summer internship working with emerging computer technologies. I'm currently working with functional languages and incremental computation. I like working on my own or doing support and coordination work for a team.

**Education**

**University of Colorado, Boulder**                                                    2015-Current
- GRE: 87+ percentile Quantitative and Verbal
- Pursuing a PHD in Programming Languages

**University of Maryland**                                                              2011-2015
- SAT: 2100+
- Graduated with Dual Degree: BS **Computer Science** / BA Philosophy
- Completed coursework in: java, C, asm, ocaml, systems, concurrency, data structures
- **CS GPA 3.7**

**Papers**
(Extracurricular)

**Student Research Competition, ICFP**                                          September 2015
- Gave a **talk** on my own research, "Sparse Adapton", to the general audience
- Presented a poster at the welcome reception

**Programming Languages Lab at UMD**                                               Fall 2014
- Put together a conference paper with a postdoc, accepted at OOPSLA
- Writing, benchmarking and analysing **state of the art** software

**Compilers Class**                                                            December 2013
- Wrote proposal for a student byte-code language based on stacks and hashtables

**Philosophy Blog**: http://www.bestthinking.com/thinkers/kyle-headley

**Projects**

**PennApps**                                                                   September 2013
- Largest student **Hackathon** at the time
- **Awarded Prize** for Best Use of Point.io API for our secure document viewer

**Additional Hackathons:**                                                       2013-Current
- GlobalGameJam, MHacks, HackMIT, HackDuke, BitCamp, DaemonDash
- Wide variety of hacks including platform game, natural language processing, mobile wifi communications, simulation, twitter aggregation, 3d visualizations

**Past Projects and Skills**
- Prototyping projects: Web apps, Flash, 3D graphics, game redesign, video, physics sims, abstract API
- C/C++, ASM, JAVA, Ocaml, Python, ColdFusion, Flex, SQL, ActionScript, Unity3D, HTML/JavaScript, Mathmatica, OpenGL, other APIs

**Work**

**Research Assistant**

College Park, MD                          **PLUM Lab**                              2014-2015
- Worked with grad students, postdoc, professors, in a group of 10-20
- Doing **research**, analysing, and benchmarking new technology
- Created a graph visualization **tool** in HTML, 'graphmovie' on GitHub

**Development Intern**

College Park, MD                          **CattLab**                               2013-2014
- CattLab works with and stores **nationwide** traffic data
- Worked with small team of 5 to develop and maintain traffic reporting software
- Fixed minor issues for immediate deployment
- Rewrote backend of system from ColdFusion to Django
- Wrote PDF creator with ReportLab, logging system in Python
- Migrated DB code from Postgres to MSSQL
- Generated reports for the **Governor of Maryland**