

Ashutosh Rishi Ranjan
118 Bouverie Street, Carlton, VIC 3053, Australia
+61 452 482 036
ashutoshrishi92@gmail.com

Education

University of Melbourne
M.Sc. Computer Science

Expected to graduate in June 2016

- Relevant courses: Declarative Programming, Programming Language Implementation, Distributed Systems & Distributed Algorithms, Cluster & Cloud Computing, Web Search & Text Analysis, Parallel & Multicore Computing.

Symbiosis University, Pune, India
B.Tech. Computer Science

Graduated 2014

Coursework Projects

Masters Research Project on Compiler Construction,
University of Melbourne

2015 to 2016

- Worked on a compiler for a new multi-paradigm language, with a new Logic Programming based Intermediate Representation and LLVM.
- Compiler written completely in Haskell.
- Researched and implemented various techniques to create an incremental and work-saving compilation process.

Compiler for a Toy Language in OCaml
Programming Language Implementation, UniMelb

Semester 1, 2016

- Implemented a complete compiler for a toy language in OCaml as part of a semester long project.
- Developed a basic *diff* based testing framework for the compiler code from scratch as extra work.

Twitter Analysis REST Service over an Open Stack IAAS,
Cluster and Cloud Computing, UniMelb

Semester 1, 2015

- Wrote a Python client to harvest geo-located tweets around SF into a CouchDB instance. The client ran as a daemon parallelly from two different servers.
- Wrote a Python application to perform several different analyses on the stored data, making use of CouchDB Map-Reduce views and present it's result as a REST API.
- Setup a NGINX server on an instance to host the website presenting this data through graphs and heat maps.
- We built our own orchestration tool using Bash scripts and rsync, imitating Ansible.

Experience

Web Developer,
Melbourne Web Co.

Contract basis, 2015

- Worked independently and within a team environment on multiple web development projects using the Wordpress platform for local Australian businesses.
- Developed custom Wordpress plugins in PHP for a few jobs.

Intern, Assistant to Project Manager,
Bahwan Cybertek, Oman

June 2013

- Modelled an implementation of an IBM Maximo Asset management solution for a client.

- Created a concept design for a responsive website for Bahwan Cybertek for the IT team.

**IT Intern,
HELLA India**

January to May, 2013

- Developed a complete new in-house Inventory Management System on a PHP back-end for the team responsible of maintaining the local HELLA electronics stock.
- Configured and Deployed an Employee Training Portal using the Moodle framework.
- Recorded usage videos and documentation to help other teams in their adoption of the portal.

Extra Curricular Activities

Co-Head, Student Technical Committee

2012

Symbiosis Institute of Technology, Pune, India

- Developed the annual college festival website and registration back-end in PHP.
- Managed the team's finances and technical logistics, while collaborating with other teams.
- Created designs for the brochures and provided other design related guidance to other teams.

Technical Skills

Languages:

Current Projects: Haskell, OCaml, Javascript (ES6+5)

Worked With: Python, Java, C, PHP, C++

Programming language implementation: Compiler Design using LLVM

Web Development and Design:

- Programmed back-ends in Javascript, Python and PHP.
- Experience with designing and using REST APIs.
- JS Toolkit: ReactJS, Express, JQuery among others.
- Front-end development with responsive design and a focus on good UI/UX.

Platforms:

- Experienced with Unix/Linux; Configuring NGINX and Apache web servers on Linux.
- Worked on projects built upon Open Stack.

Github

<https://github.com/ashutoshkrishi>

Hobbies

Cycling, Muay Thai

Referees

Available Upon Request.