

Aaron Craig's CV

CONTACT INFO	Phone: 027 755 2760 Email: aaroncraig@protonmail.ch Website: github.com/craigthelinguist	2/21 Pirie Street Mt. Victoria, Wellington
SKILLS	Programming Languages: Java, C, Python, Haskell, Prolog, SQL Modelling Languages: Alloy, UML, LTSA Markup Languages: Latex, Markdown, JSON, XML Libraries & Frameworks: JUnit, pandas, matplotlib, numpy, curses, OpenGL, XStream, Berkeley Socket API, Swing, Unity. Protocols: HTTP, DNS.	
JOB HISTORY	Victoria University, Wellington <i>Research Assistant</i> Oct 2015 – Current <ul style="list-style-type: none">Contributed to the Wyvern interpreter: github.com/wyvernlang/wyvernHelp design a logic for specifying and verifying architectural constraints.My supervisor was <i>Alex Potanin</i>. New Zealand Registry Services, Wellington <i>Research Intern</i> Oct 2014 – Mar 2015 <ul style="list-style-type: none">Analysis and summary of DNS data using pandas, matplotlib.Detection and classification of botnet domains using clustering techniques.Helped gather and verify data used to generate a map of the NZ internet's routing topology. Victoria University, Wellington <i>Sessional Assistant & Tutor</i> Mar 2014 – Oct 2015 <ul style="list-style-type: none">Marking tests and assignments; invigilating.Running tutorials, labs, and helpdesks.Classes tutored: Intro to Computer Science; Engineering Modelling & Design; Data Structures & Algorithms II; Formal Foundations of Programming. Converga Ltd., Petone <i>Business Processing Clerk</i> Nov 2013 – Mar 2014 <ul style="list-style-type: none">Data entry and verification.Sorting files by hand. (I did this using radix sort) Target Furniture, Porirua <i>Temp, Storeperson</i> Nov 2010 – May 2013 <ul style="list-style-type: none">Furniture removal, delivery, assembly, and repair.Managing inventory.Driving forklift.Training temps.Assisting and greeting customers.	
INTERESTS & PROJECTS	Natural Language Processing. One of my dreams it to make computers that can recognise and produce human language. I have made several corpora for Māori and NZ English. At NZRS I did research into detecting botnets in DNS by classifying domain names. As part of that I gave a presentation at the 2015 NZ Internet Research Forum. Programming Languages. Language arguably shapes thought. The role of language in software development is very underappreciated. I want to develop expressive and safe ways for programmers	

to write software. I'm a contributor to the Wyvern project. I'm also interested in compiler design, static analysis, and type systems.

Visualisations. At NZRS I helped verify data used to generate a map of the NZ internet. I've written several interactive visualisations for algorithms (A*, Kruskal's Knight's Tour, KNN) and cellular automata. These visualisations give an excellent description of concepts which are otherwise difficult to explain in words (such as graph theory!).

Education. I would like to see NZ education offer more in the way of computer science and logic for high school students..

Game Development. Each year I attend Pixeljam, a 48hr gamejam in Wellington. Over the years we've made several flavours of game: including a lane-runner, a Mario-style platformer, and a 3d horror game. A secret desire of mine is to see more NZ-themed videogames, particularly about NZ history.

EDUCATION	Victoria University of Wellington , New Zealand <ul style="list-style-type: none">STAR Programme2011BA Linguistics & Philosophy2012BSc Computer Science & Mathematics2013 – CurrentBSc Hons. Computer Science2016 – Current
	Tawa College , New Zealand <ul style="list-style-type: none">NCEA Level 3 (Merit endorsement).2011
SCHOLARSHIPS & AWARDS	Victoria University of Wellington <ul style="list-style-type: none">Victoria Achievers Scholarship2012 NZQA <ul style="list-style-type: none">Outstanding English Scholarship2011 Tawa College <ul style="list-style-type: none">Katherine Mansfield Award (English)2011Leanne Dixon Cup (History)2011
LANGUAGES	English Māori (Elementary)
ABOUT ME	I was born in Porirua and live in Wellington. I like creative writing and reading history, philosophy, and literature. For two years I boxed as an amateur but nowadays just like to watch. My tribe is Muaūpoko, in Horowhenua.
REFERENCES	Available upon request.