Aidan Hart Ray Pine - Curriculum Vitae

Education

Sept 2012 - May 2016 **University of British Columbia**
B.A. Hon. Linguistics
Minor in First Nations Languages
4.21 GPA (90.2% Average)

Sept 2020 - Sept 2021 **University of Edinburgh**
M.Sc. Speech & Language Processing

Publications

forthcoming   Brinklow, N., Littell, P., Lothian, D., Pine, A., Souter, H. Indigenous Language Technologies & Language Reclamation in Canada. In proceedings of *International Conference Language Technologies for All (LT4All): Enabling Linguistic Diversity and Multilingualism Worldwide* . UNESCO.

2020a   Kuhn, R., Davis, F., Désilets, A., Joanis, E., Kazantseva, A., Knowles, R., Littell, P., Lothian, D., Pine, A., Running Wolf, C., Santos, E., Stewart, D., Boulianne, G., Vishwa, G., Maracle, O., Martin, A., Cox, C., Junker, M., Sammons, O., Torkornoo, D., Brinklow, N., Child, S., Farley, B., Huggins-Daines, D., Rosenblum, D., Souter, H. The Indigenous Languages Technology Project at NRC Canada: an empowerment-oriented approach to developing language software. *Technical Report* . National Research Council Canada.

2018a   Hall, K., Pine, A., Schwan, M. Doing Phonological Corpus Analysis in a Fieldwork Context. *Wa7 xweysás i nqwaluttenhíha: He loves the peoples' languages. Essays in honour of Henry Davis* . University of British Columbia.

2018b   Pine, A., Turin, M. Seeing the Heiltsuk Orthography from Font Encoding through to Unicode: A Case Study Using Convextract. In proceedings of *CCURL 2018: The 3rd Workshop on Collaboration and Computing for Under-Resourced Languages* . European Language Resources Association.

2018c   Kazantseva, A., Maracle, B., Maracle, R., Pine, A. Kawennón:nis: the Wordmaker for Kanyen'kéha (Ohsweken Mohawk). In pro-

	ceedings of *COLING: The 27th International Conference on Computational Linguistics* .
2018d	Littell, P., Kazantseva, A., Kuhn, R., Pine, A., Arppe, A., Cox, C., Junker, M. Indigenous language technologies in Canada: Assessment, challenges, and successes. In proceedings of *COLING: The 27th International Conference on Computational Linguistics* .
2017a	Pine, A., Turin, M. Language Revitalization. *Oxford Research Encylopedia of Linguistics* . Oxford University Press.
2017b	Littell, P., Pine, A., Davis, H. Waldayu and Waldayu Mobile: Modern digital dictionary interfaces for endangered languages. In proceedings of *ComputEL-2: The 2nd Workshop on Computational Methods for Endangered Languages* .
2017c	Forbes, C., Davis, H., Schwan, M., Gitksan Research Lab, Three Gitksan texts. *University of British Columbia Working Papers in Lingusitics* . University of British Columbia.

Presentations & Guest Lectures

2020	Huggins-Daines, D. , Littell, P. , Pine, A. , Joanis, E. *Readalongs: Automatic alignment of speech and text for Indigenous language audiobooks.* 52nd Algonquian Conference. University of Wisconsin - Madison.
2020	Pine, A. *Language Technology & Language Reclamation.* FNEL 180. University of British Columbia.
2020	Pine, A. *Lexicography, Language Revitalization & Mother Tongues Dictionaries.* FNEL 382. University of British Columbia.
2019	Pine, A. , Turin, M. *How to Make a 'Mother Tongues' Digital Dictionary.* ICLDC 6. University of Hawaii.
2019	Pine, A. *Digital Kinesthetic Learning and the Gitksan Pronominal Paradigm.* ICLDC 6. University of Hawaii.
2019	Kazantseva, A. , Brant, R. , Maracle, O. , Maracle, R. , Pine, A. *Kawennón:nis: An Online Tool for Learning Verbal Morphology in Kanyen'kéha.* ICLDC 6. University of Hawaii.
2019	Pine, A. , Littell, P. , Maracle, R. *Mohawk O'Clock: Limited Domain Speech Synthesis in Kanyen'kéha.* ICLDC 6. University of Hawaii.

2019	Pine, A. *UBC Alumni Panel.* 50th Anniversay of the UBC Linguistics Department. University of British Columbia.
2019	Pine, A. *Language Revitalization & the Role of Technology.* Nerd Nite YYJ. Victoria Event Centre.
2019	Pine, A. *Language Revitalization, technology, and making the most of your undergraduate experience.* FNEL 180. University of British Columbia.
2019	Pine, A. *Language Revitalization & Technology.* ASTU 402 - Living Language: Science & Society. University of British Columbia.
2019	Pine, A. *Kawennón:nis the Word Maker for Kanyen'kéha.* Kanyen'kéha Mohawk 101R. Renison University College at University of Waterloo.
2019	Pine, A. *Kawennón:nis the Word Maker for Kanyen'kéha.* Kanyenn'kéha Mohawk Class. Tsi Tyónnheht Onkwawén:na, Tyendinaga.
2019	Pine, A. , Kazantseva, A. *Supplementing text-based Indigenous language applications with synthetic speech.* Ottawa AI. NRC Sussex, Ottawa.
2019	Daines, D. , Littell, P. , Pine, A. , Joanis, E. , Torkornoo, D. *ReadAlong Studio: Zero-shot Text/Speech Alignment for Indigenous Language Audiobooks.* Ottawa AI. NRC Sussex, Ottawa.
2019	Pine, A. , Brinklow, N. , Souter, H. , Lothian, D. *Canadian National Research Council's Indigenous Language Technology Project.* International Conference on Language Technologies for All. UNESCO HQ, Paris.
2019	Pine, A. *Developing technology to support Indigenous language revitalization in Canada.* Centre for Speech Technology Research (CSTR). University of Edinburgh.
2018	Pine, A. *Practical Phonetics.* Adult Gitxsan Class. Gitsegukla, & Terrace, B.C.
2018	Pine, A. *Digital Kinesthetic Learning and the Gitksan Pronominal Paradigm.* Research in Indigenous Languages and Linguistics. University of Victoria.
2018	Pine, A. *An Introduction to Gitksan Research.* LING 372 Guest Lecture. University of Victoria.
2018	Pine, A. *A multi-dialectal Ayajuthem talking dictionary.* . Sliammon, B.C.

2018	Pine, A. *Ama silkw sa.* Gitksan Elders Meeting. Gitksan Elder's Center. Gitanmaax, B.C.
2018	Pine, A. *Seeing the Heiltsuk Orthography from Font Encoding to Unicode: A Case Study Using Convertextract.* Conference on Collaboration and Computing of Under Resourced Languages. Miyazaki, Japan.
2018	Kazantseva, A. , Pine, A. *Kawennón:nis: The Wordmaker for Kanyén'keha.* Onkwawenna Kentyohkwa Immersion School. Ohsweken, Ontario.
2018	Pine, A. , Turin, M. *Developing Digital Tools for Language Revitalization: Demystifying Coding, Apps, and Web Platforms.* CoLang. University of Florida.
2018	Pine, A. , Turin, M. *Developing Digital Tools for Language Revitalization: Demystifying Coding, Apps, and Web Platforms.* National Institute for Japanese Language and Linguistics. Tokyo, Japan.
2018	Pine, A. *An Introduction to Gitksan Research.* LING 372 Guest Lecture. University of Victoria.
2017	Pine, A. *Introducing Waldayu & Waldayu Mobile.* ComputEL-2: The 2nd Workshop on Computational Methods for Endangered Languages. University of Hawaii.
2017	Pine, A. *Mobile App Development.* BC Breath of Life Institute. University of British Columbia.
2017	Pine, A. *Lexicography for Endangered Languages.* FNEL 382 Guest Lecture. University of British Columbia.
2017	Smith, J. , Pine, A. *Dim liseewis Xsiwis gant Sginist wil wihl hahlaalst sit'aadiit.* Gitksan Language Symposium. Gitksan Wet'suwet'en Education Society. Hazelton, B.C..
2017	Pine, A. *Ama silkw sa.* Gitksan Elders Meeting. Gitksan Elder's Center. Gitanmaax, B.C.
2017	Pine, A. *Sim ayeehl k'uuhl.* FNEL 180 Guest Lecture. University of British Columbia.
2017	Pine, A. *A visual presentation with Aidan Pine: The possibilities of our new app.* Ayajuthem language conference. Sliammon, B.C.
2017	Pine, A. *Practical Phonetics.* Adult Gitxsan Class. Gitanmaax, B.C.

2016	Pine, A. *Mobilizing Language Data: An Endangered Language Dictionary App.* Multidisciplinary Undergraduate Research Conference. University of British Columbia.
2016	Pine, A. *Making the most of undergraduate research.* FNEL 180 Guest Lecture. University of British Columbia.
2015	Pine, A. *Connecting Linguistics to Language Learners: a Lesson Plan for Gitksan.* Multidisciplinary Undergraduate Research Conference. University of British Columbia.
2015	Pine, A. *'Nit gwihl Jabisi'm.* FNEL 180 Guest Lecture. University of British Columbia.
2014	Barois, M. , Bicevskis, K. , Cheng, K. , Pine, A. *Quantifier Scope in Gitksan.* Gitksan Research Group Research Seminar. University of British Columbia.
2014	Pine, A. *Preferential Encliticization in Gitksan.* Linguistics Department. University of British Columbia.

Other Languages

Danish - Fluent. Prøve i Dansk 3 Fluency Certificate

French - Fluent. Double Dogwood High School Diploma in English & French

Gitksan - Reading/Writing: literate; Oral: Intermediate.

hənqəminəm - Intermediate. UBC FNLG 101, 102, 201, 202, & 301

Skills	Mobile development with *Ionic*, *TypeScript*, *Angular*, *Sass*
	Web development with *HTML*, *CSS/Sass*, *Angular*, *Flask*, *Stencil*
	API development with *Flask*
	Programming with *Python*, *Racket/Scheme*, *iPython*
	Acoustic Analysis/Editing with *Praat*, *Wavesurfer*, *Audacity*, *ffmpeg*
	Speech Synthesis with *Festival*
	Typesetting/Graphic design with *Photoshop*, *InDesign*, *LaTeX*, *Balsamiq*

Employment

Jan 2018 - Present **Application Development Specialist - National Research Council Canada**
Developer and researcher for NRC Indigenous Language Technology project

Oct 2016 - Jun 2019 **Software Developer - University of British Columbia**
Lead programmer for the development of four online (web and mobile) dictionaries.

Oct 2016 - Present **Software Developer - First Peoples' Heritage and Language Council of Canada**
Lead developer for redesigning, engineering and publishing 15 of FPHLCC's mobile dictionary applications for Android and iOS. Independent contract through Mother Tongues

Aug 2016 - Jan 2017 **Software Developer - Simon Fraser University**
Lead programmer for the development of a number of orthography conversion tools fo Heiltsuk and Tsilhqot'in languages. Independent contract through Mother Tongues

May 2016 - Present **Web Developer - Self Employed**
Freelance website design and development

Jan 2016 - Aug 2017 **Translator and Computational Linguist - SmartKYC (Remote Work)**
Natural language processing, writing regular expressions to capture inflectional morphological rules in French and Danish. Independent contract

Jan 2015 - Jun 2019 **Technology consultant - University of British Columbia**
Consulting and programming for the First Nations and Endangered Language program.

May 2013 - Sep 2019 **Juma Food Truck Owner & Operator - Self Employed**
I designed, commissioned to build, own and operate a food truck that runs seasonally on Vancouver Island and employs full time and part time staff

Apr 2013 - Jan 2014 **Copy Editor & Research Assistant - University of British Columbia**
Assisted in editing interlinear glossing and linguistics-related texts in the book: Written as I Remember It: Teachings (ʔəms taʔaw) from the Life of a Sliammon Elder.

Volunteer

June 2017 - present   **Hesquiaht Dictionary**
Help with data processing, web and mobile app development for the Hesquiaht language dictionary

May 2016 - present   **Squamish Dictionary**
Help with publishing online 'talking dictionary' for Squamish language in partnership with Peter Jacobs

Jan 2016 - May 2016   **Python for Lexicographers Workshop Series**
Teach basic Python and programming skills to undergraduate, graduate and post-graduate lexicographers at the UBC linguistics department

2014 - 2016   **xʷnaʔəl/əmxʷ sχəχi:ls Journal Review**
UBC Indigenous Studies Submission Reviewer

2013 - 2016   **Doreen Jensen Memorial Gitksan Class**
Assist students by explaining grammatical, phonological and orthographic concepts

Awards & Grants

2020   Scotland's Saltire Scholarship

2018   National Research Council Digital Technology 'Value for Canada' award

2016   Sanderson Family Service Award

2016   1st Place Oral Presentation at UBC Multidisciplinary Undergraduate Research Conference

2016   Dean's Outstanding Leadership Award for Academic Contribution to the Faculty of Arts

2015   UBC Arts Undergraduate Research Award

2015   UBC Student Scholarship in Arts

2014   UBC Arts Undergraduate Research Award