

David MacDonald

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- President, CanAdapt Solutions Inc.
- Invited Expert WCAG 2.0 Working Group (W3C) since 2002
- Invited Expert W3C HTML5 Working Group (W3C) since 2010
- Member of W3C WCAG Mobile Task Force
- Certification Board Member: International Association of Accessibility Professionals (IAAP)
- Member of the Association of Canadian Ergonomists (ACE) since 1998
- Security Clearance Level: GC Enhanced Reliability
- Languages spoken/written: English, French
- Education: BCOM (Magna Cum Laude) University of Ottawa (Focus on Technology)

Internet/Software Accessibility

- **World Wide Web Consortium (W3C) WCAG/HTML5 Invited Expert (2002-Current):**
 - Veteran member of WCAG, Web Content Accessibility Guideline Working Group. One of 18 members, instrumental in the creation of the WCAG 2.0 and has been working with accessibility experts on four continents since 2002. Committee work is ongoing with WCAG 2.1 in development. The only Canadian WCAG 2 team member listed on the standard: www.w3.org/TR/WCAG20/#acknowledgments
 - One of 18 members of the W3C WCAG Mobile Taskforce. <http://www.w3.org/TR/mobile-accessibility-mapping/#acknowledgments>
 - Member of HTML5 Working Group and the HTML5 Accessibility Task Force. (2011-2015)
 - Invited Expert W3C Web Platforms Working Group, responsible for HTML language (2017)
 - Invited Expert W3C ARIA Working Group, responsible for HTML language (2017)
 - WCAG2ICT Task Force, W3C investigation into WCAG as applied to desktop software. The one year study was to support the European Union M376 Committee and the US Government 508 committee. Published July 18, 2013. <http://www.w3.org/TR/wcag2ict/>
 - Co-Editor of the W3C document, [Using ARIA](#)
 - Contributor to Website Accessibility Conformance Evaluation Methodology (WCAG-EM). <http://www.w3.org/TR/WCAG-EM/>
 - Contributor to HTML5: Techniques for providing useful text alternatives. <http://dev.w3.org/html5/alt-techniques/>

- **PDF/UA WCAG sub-team:** One of 3 WCAG members forming a subgroup that provided mapping report on similarities and differences between PDF/UA and WCAG.
- **Government of Canada:** Lead consultant for the ICT section of the new Canadians with Disabilities Act targeted to become law in the spring 2018. Human Resources and Skills Development Canada (Sept 2017 - ongoing)
- **Christian Dior US:** Lead accessibility consultant for all US web properties including: dior.com, fresh.com, givenchybeauty.com, Makeupforever.com, guerlain.com. WCAG auditor, trainer of 3rd party web development and communications agencies, technical support coach. (May 2016 – ongoing)
- **Bayer - Science for a better life:** Lead accessibility advisor for all Canadian web properties, including WCAG auditing, training, coaching. Accessibility advisor for worldwide agriculture sites and accessibility for web design patterns. Accessibility auditor for select US product sites (2015 – ongoing)
- **Ontario Government:** WCAG consultant during the creation of the AODA. Accessibility auditor for the Ontario Government HTML and PDF forms and website used by 40,000 businesses to report AODA compliance. (Jan - March 2017, previous contracts in 2010 and 2009)
- **World Vision Canada:** Coached and trained web development team on how to meet WCAG with WAI-ARIA, HTML, CSS, media, and testing for accessibility. (Apr. 2017 - ongoing, sub-contract)
- **Treasury Board Secretariat:** Lead advisor to the Government of Canada on WCAG 2.0, integration and rollout of the WCAG 2 component of the GOC Web Standard, including evaluation of WCAG 2.0 automated testing tools, survey of WCAG 2.0 rule set. (Mar. – Nov. 2011)
- **Canadian Broadcasting Corporation (CBC):** Provided WCAG coaching to Accessibility Director, 40 developers, 20 Graphic Designers, 10 Interaction Designers, senior management and project managers (Feb. – Mar. 2015)
- **Aimia (Owners of Aeroplan and Telus Loyalty Points):** Provided coaching/training to the Director of Accessibility, and 15 QA specialists and designers of Aeroplan.com (Feb. – Mar. 2015).
- **Canadian Radio and Television Commission (CRTC):** Provided WCAG audit of Bell.ca, Telus, Manitoba Telecom Service (MTS), Sasktel, with remediation code recommendations and administered user testing by screen reader users. Included mobile accessibility testing on responsive sites using iPhone and Android (Jan. 2016)
- **American Museum of Natural History (AMNH), New York City:** Taught and coached web development team. This is the where the movie "A Night at the Museum" was filmed. (April 2016 – ongoing, sub-contract).
- **AcceDe Web:** Translated two accessibility training manuals (HTML, CSS, JavaScript, and complex apps) by an European French consortium from French language to English. 110 pages total. (Mar. 2016)

- **Vision Critical:** Audited and coached development team to meet WCAG with international survey creation product which contained complex visual graphical, data representations and components.
- **Algonquin College:** Accessibility services, including PDF remediation, forms creation, training on MS Office, PDF, web accessibility audit of web site. (Sept. 2015 – Ongoing)
- **Canadian Transportation Agency:** Developed WCAG training documentation for all of Canada's over 300 transportation providers and related services in Canada. (Jan. - Mar. 2015).
- **Transunion:** Trained 25 web developers and application developers, presented to senior management. (Dec. 2014, May 2015)
- **Halifax Airport:** Audit of website and report WCAG errors and remediation and training. (Feb - May 2015)
- **e-Channel:** Online high school equivalence course website for the Government of Ontario. Accessibility Audit and Evaluation. English and French sites. (Feb. 2016)
- **Canadian Institute for Health Information (CIHI):** Provided strategic accessibility roadmap of AODA accessibility roll out across five departments, 100 web developers, numerous formats including interactive eLearning, multimedia, MicroStrategy JAVA based graphic generation, big data from Canadian hospitals and health providers, PDFs, Content Management Systems, and dynamic HTML with JavaScript. (Feb. – Mar. 2014, 2015)
- **Union Pearson Express (Metrolinx train from downtown Toronto to Pearson Airport):** Evaluated WCAG conformance for wireframes, user interface responsive design site with breakpoints for desktop, tablet and mobile. (April 2014 sub-contract)
- **Canadian Paralympic Committee:** Audited main site, mobile responsive view, and mobile APP. Provided remediation code (2014, 2015)
- **NextEra Energy:** (15,000 Employee Solar and wind energy company) Taught web team and content providers on WCAG, and PDF accessibility using Acrobat, Word and InDesign. (2015 - Jan 2017)
- **Loyalist College:** Audited 20 web sites and micro sites. Provided WCAG remediation recommendations. (April 2015)
- **Great West Life/London Life:** AODA web and e-document compliance. Created a WCAG conformance checklist to be used across the entire organization (Mar. – Nov. 2013)
- **Ottawa Police:** Web accessibility evaluation and remuneration recommendations. WCAG AA (2013)
- **Blackboard Mobile Learn:** Provided testing using iOS7 and VoiceOver, and Android V.4.4 KitKat for their mobile application which will be used in most first world academic Institutions (universities, colleges etc.). Provided advice and resources for remediation of WCAG failures and usability issues for people with disabilities. (December 2013 sub-contract)
- **Wrigley's Gum Contest:** Microsite contest for the NHL. Reviewed wireframes and design files for WCAG issues in the design phase. (2014 Subcontract)
- **The KEG restaurant international franchise site, and employee site:** Reviewed wireframes and design files for WCAG issues in the design phase. (2014 Subcontract)

- **Natural Resources Canada (NRCAN):** Providing advice through evaluation, training and code examples, to Earth Sciences Sector application developers and web content providers, on how to convert current applications into WCAG 2.0 conforming applications. This included earthquake data and space weather applications accessible to the blind. (Nov. 2011 – Mar. 2013 sub-contract, 2014 direct contract)
- **Raising the Floor** (a global accessibility consortium based in Geneva Switzerland): Evaluated CMS team collaboration tool for WCAG conformance, and provided remediation recommendations. (2013)
- **City of Ottawa:** WCAG conformance as it is applied to Microsoft Office documents for the city's budgetary postings. Designed accessible public facing financial statements (July-December 2013)
- **Department of Justice (DOJ):** Training lawyers and support staff how to create accessible Word documents, and export to PDF for legal opinions. (March 2017)
- **Department of Justice (DOJ):** Training web team on WCAG 2.0, including specialized advice on difficult ALT text for images in legal documents. (2012)
- **Canadian Radio and Television Commission (CRTC):** WCAG 2.0 Website Accessibility Audit and recommendations. (2009, 2011 sub-contract)
- **Accessibility Directorate of Ontario (ADO):** Training of WCAG 2.0 for the technical and management team of the ADO preparing them to make WCAG 2.0 legal requirements decisions for the Accessibility for Ontarians with Disabilities Act (AODA) Technical and Communications Standard (Provincial legislation). (2010)
- **PC Financial:** Web site audit and WCAG 2.0 accessibility advisor to the web team (2011) and evaluation of alternate formats including large print, e-text, audio, evaluation management of English and French Braille Grade 1 and 2. (2013, 2014)
- **Public Works Government Services Canada (PWGSC):** Training of entire Web Quality Assurance Team on WCAG 2.0 (May 2010), WAI-ARIA, PDF Accessibility (Feb. 2011), Flash Accessibility (May 2011).
- **Public Works Government Services Canada (PWGSC):** Provided departmental transition strategy, to implement accessibility for the **Government of Canada Public Accounts**, which are online in PDF format. (May-August, 2011)
- **Canadian Transportation Agency:** Auditor of all websites in the Canadian transportation system. Determined level of WCAG 2.0 compliance, and provided code fixes. Included all major airlines (Air Canada, WestJet, Porter, Air Transat, etc.), VIA Rail, train stations, airports, and marine carriers under Federal Jurisdiction - WCAG 2.0, Level AA (2011).
- **Human Resources Services Development Canada (HRSDC):** Training of entire web development team on WCAG 2.0 Accessibility for PDF (July 2011)
- **Canadian Nuclear Safety Commission:** WCAG 2.0, Level AA, Audited for WCAG 2.0 compliance, public facing website, overview of 18,000 PDF's by category, evaluation of internal Sealed Source Tracking System for nuclear product transfer (2011).
- **Ontario Government:** WCAG 2.0 and Web accessibility strategic advisor for the AODA Compliance Assurance Tracking System (ACATS - the Government of Ontario tracking system and online tool whereby Ontario businesses and educational institutions will provide their website accessibility compliance claims for the Ontarians with Disabilities Act,

November 2009). Assembled a team of blind and low vision testers and lecturers for accessibility contracts. (2009)

- **Vision Australia:** Provided accessibility assessment consulting services to Vision Australia (the organization for Blind Australians), which included web accessibility assessments for the City of Sydney, Adelaide University, Minister of Forestry and Agriculture, and other government and university websites.
- **Canada Mortgage and Housing Corporation (CMHC):** Web accessibility audit of the CMHC website providing strategic accessibility solutions. (2007)
- **Canadian Association of Broadcasters:** Training on PDF WCAG 2.0 Accessibility, Accessibility audit of corporate website. (2007)
- **Intel Corporation:** Lead Accessibility consultant. Surveyed Section 508, WCAG 2.0 and other web standards and provided them with a comprehensive global strategy and internal web accessibility quality control specifications. Web accessibility audit of the Intel website providing strategic accessibility solutions. (2006)
- **Bank of America and Citizen Bank of Rhode Island:** Accessibility audit for the “Future Scholars” section of their website. Accessibility audit, report and recommendations for their global web presence. (2006 sub-contract)

Major evaluations under NDA

We provide services to customers who require an NDA:

- **Leading global US retail chain:** Strategic Roadmap for WCAG rollout across the multinational organization. Interviewed employees and stakeholders, analysed test results, and provided 80 page report for senior management (2014 Subcontract)
- **Leading global US insurance provider:** Provided AODA compliance testing and reporting for investment and retirement calculators (2013 sub-contract)
- **Leading global US based bank:** Provided AODA compliance testing and reporting for main website (2013 sub-contract)
- **One of the top global software/hardware companies:** Provided WCAG evaluation and recommended remediation of their internal Human Resources web site (2014 Sub-contract)
- **Leading US Pharmacy Chain:** Web accessibility evaluation and remuneration recommendations. WCAG AA (May 2014 sub-contract).

Lecturer/Trainer/Author

- **Canadian Broadcasting Corporation (CBC):** Provided WCAG coaching to Accessibility Director, 40 developers, 20 Graphic Designers, 10 Interaction Designers, senior and project managers (Feb. – Mar., 2015)
- **International Association of Accessibility Professionals (IAAP):** Member of 10 person team to decide the exam requirements for certification. (2015 Ongoing)

- **Quebec Accessibility Conference (a11yQC):** Meeting WCAG on Mobile devices. Delivered training in French (Oct. 2015)
- **CodeFest 2016:** Testing accessibility on an iPhone. (Feb. 2016)
- **Guelph University Accessibility Summit:** Provided preconference training on PDF Strategies for Large organizations, Intro to WCAG, chaired MathML meetup. (April 2015)
- **Algonquin College:** Accessibility services, training on MS Office, PDF accessibility, forms creation, web accessibility audit of web site. (Sept. 2018 – Mar. 2016)
- **Children's Aid Windsor:** WCAG Deep Dive (Jan 2016)
- **GTEC:** The WCAG 2 Rollout, how did we do? Lectured on the Federal court ordered transition to an accessible Government of Canada, over 106 departments, 1,500 websites, 10,000,000 web pages and over 1,000 applications (Oct. 2013)
- **CSUN 32th Annual International Technology and Persons with Disabilities Conference, San Diego, CA:** Mobile menu, Responsive Design, Accessibility API, PDF and HTML (March 2017)
- **CSUN 30th Annual International Technology and Persons with Disabilities Conference, San Diego, CA:** Update on MathML and how to Math in MS Word, PDF and HTML (March 2015)
- **Funka Stockholm Sweden:** The WCAG 2 Rollout, how did we do? Lectured on the Federal court ordered transition to an accessible Government of Canada, over 106 departments, 1,500 websites, 10,000,000 web pages and over 1,000 applications (April 2015)
- **CSUN 29th Annual International Technology and Persons with Disabilities Conference, San Diego, CA:** The story of how the Canadian Government met the responsibilities of the Donna Jodhan case (March 2014)
- **Supreme Court of Canada:** Training their forms team on Adobe LiveCycle form creation for WCAG conformance (Nov. 2014)
- **The Weather Network:** Two days of training for 11 Developers. (April 2014)
- **Trent University:** Trained entire web team and web content staff on WCAG. Evaluated previous accessibility work on the site, which had been performed by commercial web firm. (April 2014)
- **City of Sudbury:** Training PDF Accessibility, and MS office and Adobe InDesign source formats exports to PDF. (June 2014)
- **City of Ottawa:** Training on how to meet WCAG with Microsoft Office Documents(Accessibility for MS Office) to 40 employees (July 2013)
- **University of Ottawa:** Training WCAG and accessibility at the School of Continuing Education. WCAG courses in French and English (2012-current)
- **Canadian Institute of Human Resources Professionals (HRPA):** Training of WCAG component of the Certificate in Accessibility. (December 2013-current)
- **Canadian Institute Health Information (CIHI).** WCAG 2 day Deep Dive to web developers (November 2012)

- **University of Ottawa:** Staff training of 100 developers, content providers, policy makers for WCAG (2013). Courses in French and English (2012-current)
- **Great West Life/London Life:** AODA web and e-document compliance. Provided web accessibility training to 50 developers, QA, line managers and senior department officials. Created a WCAG conformance checklist to be used across the entire organization (March – November 2013)
- **Humber College:** Evaluated entire website, using automated tools and human testing as laid out as proposal for Trent University in this document. (2013)
- **Seneca College:** Trained 40 web developers, content providers, and project managers on WCAG, and provided advice on a successful rollout of WCAG across the organization. (Nov. 2013)
- **Algonquin College:** Trained over 50 webmasters and content providers in advanced WCAG techniques, and dozens of content providers in Microsoft office and PDF accessibility. Provided an evaluation audit of Algonquin website. (2013)
- **Aboriginal Affairs, Northern Development Canada (AANDC):** Series of training seminars on WCAG 2.0 Accessibility, web development team, .NET Programmers, and Communications team (2012)
- **CRTC:** Training of WCAG 2.0 Accessibility, web development team, .NET Programmers, and Communications team (2012)
- **AODA Leadership Conference:** Accessibility event bringing together Ottawa University, Carleton University, Algonquin College, Ottawa Carleton Public School Board, Ottawa Catholic School Board. Lectured on WCAG and its application to the AODA, and on the Information and Communications Standard of the AODA.
- **Ontario Government Office for Disability Issues (ODI):** Lectured on how WCAG could apply to the Ontarians with Disabilities Act. Training on WCAG 2.0 for technical staff and management team (2009)
- **Human Resources Services Development Canada (HRSDC):** Training of entire web development team on WCAG 2.0 Accessibility for PDF (2011)
- **PWGSC** – Provided training for webmasters and the web quality assurance team, on WCAG 2.0, ARIA, and emerging best practices in accessibility. (2010)
- **Voice of America:** Featured in radio and print article about accessible web design. (2006)
- **United Nations International Day of Persons with Disabilities:** Director of the day program for the Ottawa event of the at the Ottawa Congress Centre. (2004)
- **First Nations Education Conference:** Quebec City, Lectured on computer access for persons with disabilities (2003)
- **Corrections Canada:** Lecture on assistive technology for people with cognitive impairments. (2002)
- **Abilities Magazine:** Article “Necessity is the Mother of Invention”. (2000)
- **University of Ottawa:** Lectured on computer access for persons with disabilities, and Human Factors (2000)

- **National Institute of Disability Management and Research (NIDMAR):** in Vancouver and Corrections Canada in Montreal. (2000)

Technical Accommodations and Training of Persons with Disabilities

- **Manulife:** Evaluations of employees with disabilities, such as blindness, low vision, and dexterity mobilities. (2015 - 2017)
- **Canadian Bank Note Company:** Evaluate tasks for employee with low vision who examines and provides Quality Assurance on currency. (2015)
- **TD Bank:** Hard of hearing, low vision employee: set up dual-ear T-Coil hearing aids for telephone use, FM Assistive Listening System, ergonomics, magnification accommodations. Two blind Employees who are blind, evaluations and recommendations on accommodations, including WCAG review of internal and external systems. (2010 - ongoing)
- **Canadian Human Rights Commission:** JAWS Training and Assistive Device accommodation of an employee who is blind and has other dexterity disabilities.
- **Department of Justice:** Evaluation, training and providing recommendations to blind lawyer (zero vision) who negotiates nuclear contracts. Evaluation and training on use of JAWS screen reader, Kurzweil OCR, mobile communications, wireless telephone headset, web surfing and Microsoft Outlook, Word, with text to speech. Virtual Private Network, Citrix evaluation. Evaluation included all aspects of work tasks, the technical environment, creating tasks and evaluating outline description of personal assistant, and evaluating physical environment, and benefits of GPS for the blind. Provided 9 weeks of training.
- **Department of Justice:** Evaluation and training of legally blind lawyer for the Canadian Government who provides Canadian legal expertise to the third world. Training using a mobile recorder to transfer verbal notes to written documents via Dragon Naturally Speaking, low vision magnification, Zoomtext with voice, Strix mobile. Provided 9 weeks of training.
- **Health Canada:** Evaluation and training of a lawyer with progressive Macular Degeneration (legally blind), who provides expertise on legal implications of various patents and policies in the pharmaceutical industry. Provided 9 weeks of training.
- **Health Canada:** Assessment of Network Administrator with multiple hereditary neurological disabilities which included spontaneous falls, mobility, legally blind. Included evaluation of all aspects of the technical and physical employment environment, health and safety concerns, impact on co-workers, examined current policy as it pertains to accommodation, and evaluation of workload. Employee is successfully employed.
- **Royal Bank:** Evaluation, accommodation and training of investment banker with quadriplegia (C4-C5). Trained on the use of Dragon Naturally Speaking Professional. Evaluation and training of blind employee (zero vision) for Royal Bank, Blind Olympian and spokesman for Royal Bank Young Olympian program. Training of Excel spreadsheets, RBC internal software, training on financial analysis using software, install and configure the assistive technology Braille Embosser, Duxbury Braille translation, Kurzweil scanning and reading software, JAWS screen reader, hardware solutions. 2010 -2015

- **Parks Canada HR:** Recruitment candidate with Spina Bifida. Assessed work tasks, work load, physical environment, technical environment optimal number of working hours, impact on co-workers, strengths/limitations and necessary accommodations. (2011)
- **Other assessments include:** accommodations and/or training of blind employees with other disabilities at ScotiaBank, Royal Bank, CIBC, Citizenship and Immigration, TD Bank, Royal Bank (Ottawa, Winnipeg, Regina), Agriculture Canada, Department of Justice, recommend Assistive technology solutions. Evaluate employment tasks, recommend assistive technology solutions, provide training. Ontario Disability Support Program (ODSP) Evaluator (2004 - ongoing)

Canadian Patent

Granted Canadian Patent [#2,186,789](#) by CIPO for a special keyboard for disabled persons

Disability Policy

- **Treasury Board Secretariat:** Implementation of WCAG reporting policy for Donna Jodhan case (2011)
- **Intel Corporation:** Recommended standards for their global web presence (2006)
- **National Research Council/Treasury Board Secretariat:** Environmental Scan of disability accommodations in the Canadian Government. (2001)
- **Industry Canada:** Key researcher as they developed the Accessibility Procurement Toolkit. A centerpiece for the Public Works Canada procurement department. For this project, David interviewed dozens of experts in the US, Canada, Germany, Britain, and Japan, including the Canadian Standards Association and the US Access Board; analyzed the data and established a database of "best practices" for successful procurement of accessible products. (1998 – 2000)
- **Industry Canada, Assistive Devices Industry Office:** Forty page report on the status of Assistive Devices Manufacturers in Canada with recommendations to aid the industry in serving people with disabilities better. (2000)

Education and Associations

- Certification Board Member: International Association for Accessibility Professionals (IAAP)
- Advisory Board Member: Ontario Disability Support Program (ODSP) Government of Ontario
- Board Member 2008: Global Alliance on Accessible Technologies and Environments
- Board Member 2002: Dawson College Montreal, Adaptive Devices Research
- BCOM, Magna Cum Laude, U of O focus on technology and disability
- Member Association of Canadian Ergonomists 1998 - 2016 (ACE)

Hobbies

Music: [WCAG Theme Song](#) has over 45,000 combined views on YouTube
