

Paul Nijjar

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Transferable Skills

- ◇ Identifying infrastructure deficiencies and improving them.
- ◇ Maintaining “big picture” judgement while working through details.
- ◇ Troubleshooting and solving problems.
- ◇ Learning unfamiliar new technology, implementing it, maintaining it, and teaching it to others.
- ◇ Prioritizing technology for the benefit of users.

Recent Employment

Unemployed Burden on Society, Dec 2016-present

Taken on assorted community-oriented tech projects. A few highlights:

- ◇ Migrated <https://kwlug.org> from **Drupal 6** to **Drupal 8**.
- ◇ Implemented search, RSS, newsletters for <http://wacamp.com> (**Backbone.js**, **Python**).
- ◇ Ran “laptop rescue missions”, where volunteers of varying skill levels refurbished donated laptops.

IT Generalist, The Working Centre, 2008-2016

Systems administration (approximately [SAGE Level III](#)) and user support for an ambitious nonprofit with a frugal budget. IT infrastructure ranges from employment counsellor workstations to medical clinics, with lots in between. A few highlights:

- ◇ Replaced manual imaging and non-existent third party updates with automated installers (**Windows WAIK**, **Debian/Ubuntu preseeding**) and package deployment (**WPKG**, **WSUS**, **wsusoffline**, some **Saltstack**) while maintaining license compliance.
- ◇ Developed streamlined waiting list/alerting webapp and desktop client (**Django**, **wxPython**).
- ◇ Scripted Windows update infrastructure to work around rollback software deficiencies (**Powershell**).
- ◇ Completed major redesign of <http://www.theworkingcentre.org> (**Drupal 6**).
- ◇ Sanitized and isolated network infrastructure (**pfSense**, **Cisco** switches); connected six remote locations into one domain (**OpenVPN**, **DFS**); safely enabled employees to work from home (**Hamachi**, **OpenVPN**).
- ◇ Mentored coworkers and helped them solve their issues; patiently helped end-users of all skill levels.
- ◇ Administered domain (**Active Directory** on **Server 2008 R2**) and mail servers (**Exchange 2010**, **Exim**); designed and implement company-wide backup infrastructure (**Backup Exec**, **rsync**).
- ◇ Built out monitoring (**Nagios**, **Cacti**, and others) and ticketing (**Request Tracker**) systems for internal IT use.
- ◇ Wrote end-user documentation about viruses and spyware (**Sphinx**). See <http://cr-handouts.dyn.theworkingcentre.org>.
- ◇ Maintain phone infrastructure (mostly legacy **Norstar** equipment, some **VoIP**, some **Asterisk**).

Sessional Lecturer, University of Waterloo, 2004-2007

Taught several first-year computer science courses, ranging from ACM CS0 (how to use computer applications) through ACM CS2 (introductory data structures and algorithm analysis). Worked to engage students and improve their experience (for example, by getting login shells changed from csh to tcsh in computer labs). Some comments:

“Explained work very well. Never hesitated to go over stuff to ensure we understood.”

“I liked the demos, his humour. He was very down to earth and was like an equal. I also appreciated that he took comments after classes and acted on those comments to improve the course for us.”

Class sizes ranged from 20-80 students, and were usually coordinated with teaching assistants and other lecture sections.

Community Involvement

- ◇ 2017: “Surviving Drupal 8 Migrations” for Waterloo Region Drupal User Group.
- ◇ 2015: Delivered “How to Win Proportional Representation” presentation. See <https://youtu.be/hyy2u0CQFg0>.
- ◇ 2014, 2010: Organized municipal all-candidates meetings: Kitchener Mayor, Wards 9-10, Regional Council.
- ◇ 2013: Delivered Ignite Waterloo talk: “Does Canadian Blood Services Have an Image Problem?” See <http://youtu.be/vRfzDPKI9U0>.
- ◇ 2011-2012: Ran KW Freeskool courses: [Linux Literacy](#), [Computer Security](#)

User Group Organization

- ◇ 2001-present: [Kitchener-Waterloo Linux User Group](#)
- ◇ 2015-2017: [NetSquared Kitchener-Waterloo](#)
- ◇ 2007-2015: WPIRG Community Garden

User Group Participation

- ◇ 2008-present: [Waterloo Region Drupal User Group](#)
- ◇ 2008-present: [Waterloo-Wellington IT Professionals](#)

Education

Master of Mathematics

University of Waterloo, 1999-2004. Supervisor: Dale Schuurmans.

Thesis topic: “An Attempt to Automate NP-Hardness Reductions via Second-Order Existential Logic.”

Bachelor of Science

University of Toronto at Mississauga, 1995-1999

Honours B.Sc with High Distinction. Major: Computer Science. Minors: Mathematics, English.