

# Parker J. Banks | Curriculum Vitae

✉ parker@pbanks.net • 🌐 www.pbanks.net • 📍 parkbanks

## Work Experience

---

### SWAT Consulting Inc.

*Statistical Analyst*

**Strathmore, Alberta**

*July 2018 - Present*

Statistical modelling, visualization, and prediction of environmental impacts. Writing assessment reports. Development of tools for calculating site criteria, separating co-mingled plumes, and predicting spill movement.

### Matrix Solutions Inc.

*Environmental Scientist: Soil Contaminants*

**Calgary, Alberta**

*Jan. 2017 - July 2018*

Statistical modelling of environmental impacts to aid in the identification, localization, and remediation of hydrocarbon and produced water spills. Developed new methods to remediate PHC impacts.

### McMaster University

*Teaching Assistant*

**Hamilton, Ontario**

*Sept. 2015 - April 2020*

Prepared materials for courses on statistics and neuroscience. Gave lectures, tutorials, invigilated, & marked exams.

### Canadian Centre for Behavioural Neuroscience

*Laboratory Assistant*

**Lethbridge, Alberta**

*May - Aug. 2015*

Designed, programmed, and conducted research on humans and rats in a study of the role of dopamine in learning and decision-making. Conducted histological analysis of rat brain tissue.

### Matrix Solutions Inc.

*Seasonal Environmental Intern*

**Calgary, Alberta**

*May 2012 - Aug. 2014*

Conducted site assessments, research on new soil washing technologies, and aerial photo searches. Wrote groundwater monitoring reports, organized budgets, and managed EM & chloride plume data.

## Education

---

### McMaster University

*PhD. Psychology*

**Hamilton, Ontario**

*Sept. 2015 - April 2020*

Thesis - Where not what: the role of spatial-motor processing in decision-making

### University of Lethbridge

*B.A.Sc. Music & Psychology, Honours with distinction*

**Lethbridge, Alberta**

*Sept. 2011 - May 2015*

Thesis - No programming required: the emergent properties of machine learning algorithms

## Software

---

### pbanks.net

*HTML/CSS/Javascript*

My personal website

**Nov. 21, 2020**

<https://pbanks.net/> 🌐

### recipeasly.org

*HTML/CSS/Javascript*

Ad-free recipe website

**Mar. 8, 2021**

<https://recipeasly.org/> 🌐

## Peer-Reviewed Publications

---

<b>Where not what: the role of spatial-motor processing in decision-making</b> <i>Primary Author: Ph.D. Dissertation</i>	<b>McMaster U</b> <i>May 31, 2021</i>
<b>Sexually dimorphic effects of cannabis use on visuospatial decision-making</b> <i>Primary Author: Journal Publication</i>	<b>In Submission</b> <i>Jan. 6, 2020</i>
<b>Relationship between soil and groundwater salinity in the WCSB</b> <i>Primary Author: Journal Publication</i>	<b>Environ. Monit. Assess.</b> <i>Dec. 1, 2019</i>
<b>Lose-shift responding in humans is promoted by increased cognitive load</b> <i>Contributing Author: Journal Publication</i>	<b>Front Integr Neuro</b> <i>March 8, 2018</i>
<b>Implicit valuation of the near miss is dependent on outcome context</b> <i>Primary Author: Journal Publication</i>	<b>JoGS</b> <i>July 1, 2017</i>
<b>No programming required: the emergent properties of machine learning algorithms</b> <i>Primary Author: Honours Thesis</i>	<b>U of L</b> <i>May 31, 2015</i>

## Presentations

---

<b>Perceptual learning in fingerprint detectives</b> <i>Primary Author: Invited Talk</i>	<b>J Vis</b> <i>May 22, 2018</i>
<b>Cognitive bias and reward affect contrast and response gain</b> <i>Primary Author: Poster Presentation</i>	<b>J Vis</b> <i>September 1, 2017</i>
<b>Psychophysics of fingerprint identification</b> <i>Primary Author: Poster Presentation</i>	<b>J Vis</b> <i>August 31, 2016</i>

## Skills

---

### Programming Languages.....

- C/C++
- Go
- Python
- Matlab
- Verilog
- JavaScript
- HTML/CSS
- R
- Bash
- L<sup>A</sup>T<sub>E</sub>X

### Fabrication

- Soldering
- Electronics Repair
- Circuit Design
- Carpentry
- Wheelwrighting

### Safety Training

- First Aid
- H2S Alive
- Confined Space
- WHMIS
- TDG