

ELLEN MARINKO

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SUMMARY

I am a data scientist/statistician at BHP with over two years' experience in mining, energy and resources sectors. Recruited as a mathematics & statistics graduate in 2018, I am a highly motivated individual, currently working within BHP's Technology function. In this role, I enjoy researching and designing creative solutions using mathematics, statistics and machine learning to help address business challenges across the value chain. In my day to day role, I program in R & Python however outside of work, through a She-Codes web application scholarship I have learnt Django REST framework, HTML/CSS, JavaScript and React JS. This scholarship helped me discover that my passion is in development (in particular front-end) because it combines my love of problem solving with design and as well as being able to create features and products that have a real impact with end users.

EDUCATION

2014-18 **University of Western Australia**
Bachelor of Science with First Class Honours in Mathematics & Statistics
Weighted Average Mark: 83%, GPA: 7/7

Probability & Stochastic Processes – 89%,
Computationally Intensive Methods in Statistics - 82%
Applied Predictive Modelling – 81%
Bayesian Statistical Modelling and Inference - 85%

2020 **She Codes Plus Scholarship**
A web application course that focussed on building an enterprise web application using HTML/CSS, Python, Django, JavaScript and React JS.

EXPERIENCE

2019- pt **Specialist Data Scientist & Applied Maths at BHP**
Full time position as a statistician in the Application & Algorithms team, currently working on Machine Learning for Geoscience projects focusing on exploration & resource estimation. My day to day work involves using data analysis tools (R & Python) to apply machine learning, statistical analysis, deep learning, and data visualisation techniques to a wide range of problems.

Key Responsibilities of current role:

- Through agile work practice, deliver statistics and machine learning based solutions to the business.
- Engage with the stakeholders to understand their problem and requirements for success with a focus on the inclusion of explainable machine learning techniques to help stakeholder adoption of solutions.
- Present technical machine learning materials to non-technical audiences, using clear and effective communication to create technical reports and presentations that are easy to interpret and of a high standard.
- Promote STEM across the business and contribute to the analytics community of practice at BHP.

2018- 19 **Specialist Innovation at BHP (Innovation Strategy)**

Started at BHP part-time during honours in the Innovation Strategy team responsible for developing a global business strategy to support BHP's vision to be fully integrated and highly automated by 2025.

- 2018 UWA Economics and Business Statistics (STAT1520) Private Tutor**
Private tutor for first year UWA students for an economics and business statistics unit.
- 2018 Statistics Intern at the Water Corporation (Honours Scholarship)**
Awarded an industry driven CEED scholarship in competition with other students. This allowed for a mathematics & statistics honours thesis sponsored by the Water Corporation. My research involved defining the scope and developing statistical models for the client.
- 2017- 18 Data Science Intern at Woodside Energy Ltd (Summer Vacation Program)**
Three-month placement in the production analytics stream of the Woodside Data Science team. Assisted in the development of statistical models for high dimensional data, aimed at enabling informed decision making to maximise production at Woodside's LNG facilities.
- 2017-18 High School Mathematics Private Tutor**
Private tutor for year 9/10/11 students in Mathematics and general sciences.
- 2017 Data Science Intern at Optika Solutions**
Eight month placement at Optika Solutions, working on a project titled "Can Stress Be Detected From Wearable Devices?" Using portable device (Fitbit) data, I investigated whether this information combined with chemically analysed hair samples was sufficient to identify the times when burns patients experienced significant stress.

AWARDS

- 2018 Co-operative Education for Enterprise Development Scholarship**
Awarded an honours scholarship with paid thesis and placement at the Water Corporation.

SKILLS

Skills Proficient at R & Python

Organisations Toastmasters member, Women in Perth BHP committee, Applied Maths & Decision Sciences BHP Chapter contributing member, Claremont Water polo Club.

VOLUNTEERING

- 2020- pt I3 STEM Mentoring**
BHP Mentor for the I3 course for all Year 10s at St Marys Girls School which is a program that aims to improve girls' confidence in STEM and their capacity to transfer knowledge, as well as to encourage girls to remain engaged in STEM subjects. I currently mentor a group of five, year 10 girls who are building a recycling app, through weekly mentoring sessions.
- 2020- pt Women in Perth BHP (WIP) Treasurer**
Volunteer treasurer on the Women in Perth committee. Women in Perth is a 'women-focused, men-friendly' strategic networking group. WIP focuses on development, networking and thought leadership activities that create a bias for action.