

BENSON COELHO

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LinkedIn: [Benson Coelho](#) | Portfolio: bdcoelho.github.io | GitHub: [/bdcoelho](#)

Full-stack Web Developer drawing on an extensive background in computer modelling and engineering software development to build elegant, scalable and solution-driven web applications with an intuitive user interface. Earned a certificate in Full Stack Web Development from the coding bootcamp at Monash University.

TECHNICAL SKILLS

Languages: JavaScript ES6+, CSS3, HTML5, SQL, NoSQL, R, Python

Applications: GitHub, MongoDB, MySQL

Tools: Express, React, Node, Handlebars, jQuery, Bootstrap

PROJECTS

HowdyNeighbour! | github.com/bdcoelho/Project3 | mysterious-inlet-60468.herokuapp.com

- Summary: An application to share tools and equipment with your neighbours
- Role: Sole author
- Tools: MongoDB/geoJSON Schema, Express, Node, React, Google Maps API

Farmer's Market | github.com/lcerdeira/OrganicS2 | p2idea.herokuapp.com

- Summary: A scalable and repurposable e-commerce website focussed on small and regional businesses
- Role: Team Member - Back-end Developer
- Tools: HTML, CSS, JavaScript, jQuery, Node, Express, mySQL/Sequelize

Weather App | github.com/bdcoelho/Weather-Dashboard | bit.ly/2JcpQkK

- Summary: A simple weather dashboard for a traveller wanting to search for, save and manage weather information at their upcoming destinations.
- Role: Sole author
- Tools: HTML, CSS, 3rd-party APIs, jQuery

EXPERIENCE

Senior ESD Engineer
Setmetrics

June 2012-Present
Melbourne, VIC

Responsibilities

- Provided engineering input to the energy modelling software and web interface development process
- Developed prototype energy modelling software and tested final release versions
- Created and calibrated complex thermal models of existing buildings for retrofit assessments, operational diagnostics and controls optimisation

- Conducted thermal model-based optimisation of HVAC controls for new-builds
- Trained and mentored junior ESD engineers

Accomplishments

- Developed a platform to perform auto-calibration of energy models and optimisation of design and controls based on genetic algorithms, allowing a much higher degree of flexibility than existing platforms
- Managed the development of engineering and reporting software tools that greatly reduced the number of hours spent on related tasks
- Contributed to the identification of a number of bugs and potential enhancements in the Energyplus building simulation software by engaging with engineers and researchers at GARD Analytics and Lawrence Berkeley National Laboratory, USA

**Hayat Communications
Power Systems Engineer**

**2008-2011
Kuwait City, Kuwait**

Responsibilities:

- Supervised installation of power, cooling and monitoring systems for one of the largest mobile telecom operators in the country
- Conducted on-site testing and commissioning of power systems and monitoring/alarm systems
- Managed engineering services relating to passive network elements
- Supervised and trained field technical staff
- Maintained network availability within SLA and delivered monthly reports

Accomplishments

- Recommended a series of measures that contributed to maintaining SLA performance during peak periods
- Designed and installed a partial load disconnection upgrade to reduce outage in the event of power failure
- Assisted in design and implementation of a regional first hybrid power system for off-grid BTS sites • Designed and installed a cost-effective fuel theft detection system for off-grid sites

EDUCATION

Certificate, Full Stack Web Development – Monash University

Melbourne, VIC

Master of Environment: Energy Efficiency Modelling and Implementation – University of Melbourne

Melbourne, VIC

Bachelor of Engineering, Mechanical - Visveswaraya Technological University

Karnataka, India

Referees are available on request.