# dalan mendonça

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## **Employment**

#### Product Integrity, Facebook

Nov '13 – present Specialist

Working to create a system to automatically classify and rank malicious objects based on insights gleaned from negative user feedback and characteristics of the social graph.

Working to improve the quality and user experience in Facebook's URL classifier.

#### Global Sales Insights, Facebook

Aug '13 – Oct '13 Analytics Specialist

Built a new automation infrastructure using Python and VBA. Resulted in the time taken for insight generation getting halved.

Was responsible for end-to-end creation and deployment of the data infrastructure for our newest ad products.

Led the first company-wide effort to benchmark the *App Installs* product and surface engagement data for brands on Instagram.

#### Product Integrity, Facebook

May '12 – Jul '13 Analyst

Worked extensively on Facebook's petabyte-scale data infrastructure; created systems to fight fake likes. Resulted in the removal of over 3 billion fake likes from the social graph.

Worked towards finding means to combat spam on Pages. Resulted in a reduction in spam from 33% to 11%.

#### Research & Development Center, Su-Kam Power Systems

Jul '11 – Dec '11

Trainee

Implemented a PID controller for voltage regulation. To optimize for speed, the implementation inlined assembly code within C code. Was able to successfully correct voltage spikes within two half-cycles. Also developed a simulation of a single-phase inverter.

#### **Essar Power**

May '10 – Jul '10

Intern

Worked at a 120 MW captive power plant. Studied the use of distributed control systems to control a power plant. Learnt about the Indian Electricity Laws and the Indian electrical grid.

## **Projects**

#### Thermal imaging for human detection

Developed image-processing software to identify and track humans from real-time thermal streams using *OpenCV*. Also built a low-cost prototype using passive IR sensors and an *Arduino*.

#### A system for home automation

Built a framework to control household electronic devices with a Bluetooth-enabled phone using C in *PSoC*. Was able to successfully control both wired and wireless devices.

#### Profit models for media companies in the age of P2P sharing

Explored innovative business models and new markets for media companies given that their traditional models (based on distribution and physical goods) are being increasingly challenged

#### Gesture-based photo navigation

Created a gestural interface for navigating Facebook photo albums. Used a *Kinect* for gesture recognition in tandem with the Facebook API.

#### Education

### Birla Institute of Technology & Science, Pilani (Goa campus)

2008 - 2012

Bachelor of Engineering, Electrical & Electronics Engineering

## Summary of skills

Data: HiveQL, R, Tableau

Design: Dreamweaver, Fireworks, Photoshop

Electronics: Arduino, ModelSim, PSoC, PSPICE, Verilog, Virtuoso

Programming: C, C++, CSS, HTML, JS, Matlab, OpenCV, PHP, Python, SQL

#### Awards & honors

Was ranked first out of 20 teams in *Cryptoquest* and runner-up out of 10 teams in *Enerovation* at *Quark*, the annual techfest at BITS, Pilani (Goa campus), 2009.

Was awarded a partial tuition fee waiver for the entire duration of the B.E. (Hons.) programme at BITS, 2008 – 2012.

Was ranked first out of 200 students at St. Joseph's School, Mumbai in the High School Leaving Certificate Examination, Maharashtra State Board for Secondary Education, 2006.

### Extra-curricular activities

Elected to the *Council of Student Affairs* at BITS under the portfolio of student mess representative. Successfully negotiated with mess contractors for a modest price hike to combat inflation. Also modified the existing mess choice system to be more student-friendly.

Was a member of the *Venue Management Team* for *Quark*, 2009 & 2010. Managed the allocation and setup of venues as well as co-ordination of events during the fest.

Designed several posters and websites for college events.