TTLAB Progress Report and Research Preview II

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Highlights

► What is TTLAB

► Research Update

► Future Plans

TTLAB History

Started last year as an experiment with one student Can an undergraduate student publish within 3 months?

▶ Has grown to 17 people within one year (almost at capacity)

 Decided to include other areas (EE and Math), all levels (undergraduate to PhD) and non-UWI researchers

 First research preview held in Feb 2016 with plans for semi-annual event

Staff (CS, EE and Math students by invitation)

- ▶ PhD students (3 year Fellowship and Travel Grant) [2]
- ▶ MPhil students (2 year Fellowship and Travel Grant) [3]
- ► M.Sc (Scholarship for first-class/full-time else volunteer) [4]
- BSc First Class Honor Students (Stipend and Travel Grant) [0]
- Undergraduate Students (volunteer) [1]
- Scholarship AP students (Travel Grant) [3]
- ▶ Non-Students or Students at Other Universities (volunteer) [4]

Work Environment

No Offices

- Staff choose their area of research (if they wish)
- Costs covered by TTNIC (Fellowship, Stipends, Travel Grants)
- Meetings are typically on-demand and online

No pressure to publish

Six Month Report: Published Papers

- C. Millette and P. Hosein, "A Consumer Focused Open Data Platform", International Conference on Big Data and Smart City, Muscat, Oman, Mar 2016.
- Ramneek, P. Hosein, W. Choi and W. Seok, "Congestion Detection for QoS-enabled Wireless Networks and its Potential Applications", Journal of Communications and Networks, June 2016, vol. 18, no. 3.
- S. Hosein and P. Hosein, "Improving Power Generation Efficiency using Deep Neural Networks", ICML Workshop #Data4Good: Machine Learning in Social Good Applications, New York, USA, June 2016
- S. Sooklal, P. Hosein and S. Teelucksingh, "A Review of Human Body Shape Detection Techniques and Their Application to the Prediction of Health Risks", 8th International Conference on e-Health, Madeira, Portugal, July, 2016
- Ramneek, P. Hosein, W. Choi and W. Seok, "Quality of Service Support for High Performance Computing on Mobile Devices", International Conference on High Performance Computing and Simulation, Innsbruck, Austria, Jul 2016.
- I. Rahaman and P. Hosein, "Using MapReduce for Impression Allocation in Online Social Networks", 12th International Workshop on Mining and Learning with Graphs, San Francisco, USA, Aug. 2016
- S. Hosein , P. Hosein , W. Kattick, V. Rattan, "Application for Power Grid Fault Management", International Conference on Intelligent and Advanced Systems, Kuala Lumpur, Malaysia, Aug, 2016
- I. Rahaman and P. Hosein, "Heuristics for Advertising Revenue Optimization in Online Social Networks", IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, San Francisco, USA, Aug. 2016.
- K. Bahadoor and P. Hosein, "Application for the Detection of Dangerous Driving and an Associated Gamification Framework", International Conference on Mobile Web and Intelligent Information Systems, Vienna, Austria, Aug 2016.

Six Month Report: Submitted (with some accepted)

- N. Chamansingh and P. Hosein, "Efficient Sentiment Classification of Twitter Feeds" IEEE International Conference on Knowledge Engineering and Applications, Singapore Sept, 2016 [accepted]
- P. Hosein and S. Boodhoo, "Event Scheduling with Soft Constraints and On-Demand Re-Optimization" IEEE International Conference on Knowledge Engineering and Applications, Singapore Sept, 2016 [accepted]
- I.Rahaman and P. Hosein, "On the Multi-Stage Influence Maximization Problem" Latin American Conference on Computational Intelligence, Cartagena, Columbia Nov, 2016 [accepted]
- S. Hosein and P. Hosein, "Load Forecasting using Deep Neural Networks", IEEE International Conference on Smart Grid Communications, Sydney, Australia Nov, 2016 [accepted]
- K. Maharaj and P. Hosein, "Location Obfuscation using Smart Meter Readings", ICACCE 2016, Durban, South Africa
- L. Bigram, J. Earle and P. Hosein, "Cost Minimization of Library E-Subscriptions", CONFENIS 2016, Vienna, Austria
- P. Hosein, L. Girod-Williams and C. van Rensburg, "Cyclic Beam Switching for Smart Grid Networks", NSysS 2017, Dhakka, Bangladesh

Plans for 2017

- ► Target fewer (6) conferences and more journal submissions
- ► File Patents (one filed this year)

- Develop more Prototype Products (like App done for T&TEC)
- More industry collaborations
- Expand program (if income can be generated)

Conclusions

► TTLAB experiment was a success (first employee is leaving)

Now seen as a home for the orphaned researcher

▶ Industry is showing an interest in our expertise

Agenda

Laura	5	Welcome on behalf of IEEE/TTLAB
Patrick	10	Intro to TTLAB
Ramneek	30	present two papers
Stefan	30	present two papers
Inzamam	30	present two papers
Cherlton	15	present paper
Shellyann	15	present paper
Keshav	15	present paper
Steffan	10	overview of accepted paper
Nicholas	10	overview of accepted paper
Kiran	10	overview of submitted paper
Laura	10	overview of submitted paper
Laurielyse	10	overview of submitted paper
Chris	5	ongoing work
Kevin	5	ongoing work
Jonathan	5	ongoing work
networking	25	food

Group Meeting

- Introductions
- TTLAB Structure
- Benefits overview
- Conferences
 KDD (ML), WWW (OSN), PIMRC (Wireless),
 SmartGridCom (SG), COCOA (Optimization), ICKEA (DSS)
- Massy and T&TEC
- Brainstorming session