Education in Flow Analysis

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Outline

Motivation

Professional Education

Undergraduate Education

Graduate Education

Motivation

Integration of flow into curricula

- Traditional subjects
- Flow practice
- Flow research

Integration of flow education efforts

- Professional
- Academic

Professional Education -- Traditional

Goal: allow network analysts to use flow-based tools and methods

Teaching approach: (local or distance)

- Tool driven

- Task driven

- Network driven

Issues:

- Avoiding overload

- Meeting needs at varying levels of proficiency

- Meaningful exercises

Professional Education -- Integrated

Goal: Introduce flow as means of illustrating other topics of interest.

- Network Administration
- Network Protocols
- Network Design

Teaching approach:

- Illustration-based (not tools, results)
- Method-based (procedure and results)

Value:

- Integration of security and practice
- Illustration from live traffic (probably anonymized)

Issues:

- Time
- Distraction factor

Undergraduate Education

Integrated

- Operating systems or network courses
- Analogous to professional integrated courses

Special Topics

- Training analysts
- Leading in to research

Issues:

- Scope and Sequence
- Direction

Graduate Education

Integrated

Practicum

Lecture/Lab

Seminar

Summary

Range of Options

Contributions

Panel

Software Engineering Institute | CarnegieMellon

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