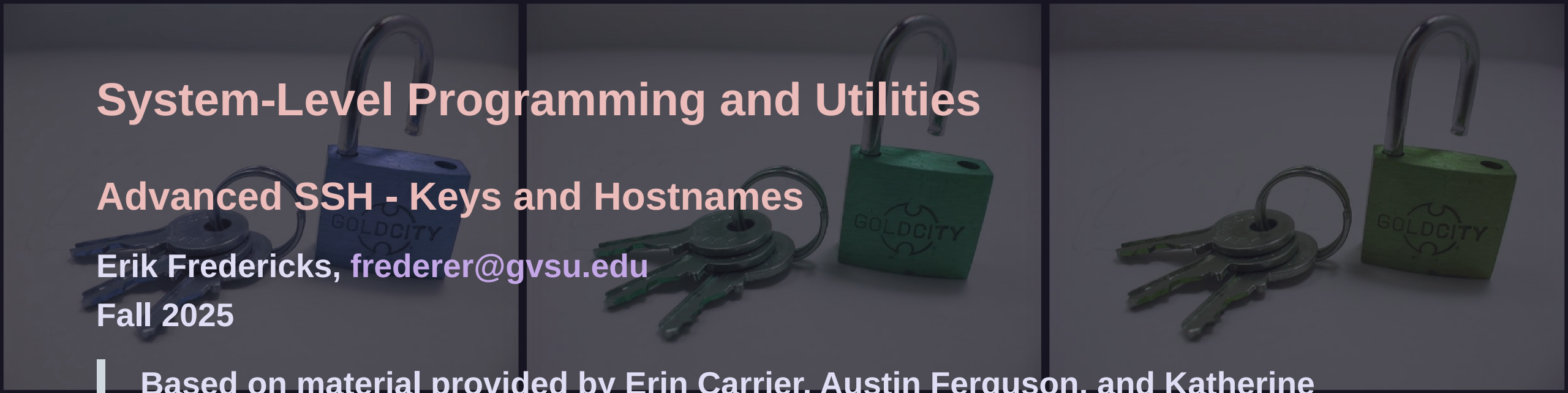
CIS241



System-Level Programming and Utilities

Advanced SSH - Keys and Hostnames

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> **Based on material provided by Erin Carrier, Austin Ferguson, and Katherine Bowers**

ssh is fine - but...

- Lots of typing!
- You have to remember `eos##.cis.gvsu.edu`
  - Or worse, an IP address
- Also you can't see your password
  - False it is `hunter2` but I just see `*******`

Let's create a hostname alias!

In your `~/.ssh/` directory:

- Create (or edit) a file named `config`

In that file, add:

```
Host eos01
Hostname eos01.cis.gvsu.edu
User yourusername
```

And then: `ssh eos01`

Now, ssh keys!

We can skip the whole password thing and use encrypted keys!

Default locations (on the machine you're ssh'ing *from*)

- `~/.ssh/id_rsa` - private key
- `~/.ssh/id_rsa.pub` - public key

Using ssh keys

1. First, make sure you don't have them already
- `ls -la ~./ssh`
2. Generate the keys
- `ssh-keygen`
3. Share the public key (add to `~/.ssh/authorized_keys`)
- `ssh-copy-id -i path_to_key username@server`

Common issues

- **Errors with `authorized_keys` file**
  - Make sure the file exists: `touch ~/.ssh/authorized_keys`
- **Wrong permissions**
  - `chmod 600 ~/.ssh/authorized_keys`
  - `chmod 700 ~/.ssh`
- **If you have `ssh` and `ssh-keygen` but not `ssh-copy-id`**
  - We can manually copy the key and add it to the file
    - `scp ~/.ssh/id_rsa.pub username@hostname:~`
  - Login to server via ssh
    - `cat id_rsa.pub >> ~/.ssh/authorized_keys`